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MANN'S

DESCRIPTIVE
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1920

GUIDE FOR THE
FARM AND GARDEN

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U. S. Department of Agriculture.



P. MANN & Co.

207 Seventh St., N. W., Opposite
Center Market, Washington, D. C.

THE PLANTER'S GUIDE

Containing a monthly calendar of operations and some useful tables, arranged to help the gardener or farmer in sowing seeds or setting out of plants from February to October in the latitude of Washington.

FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
Sow in Hotbed Early Beans Broccoli Early Cabbage Forcing Carrot Early Celery Cucumber Eggplant Early Lettuce Parsley Pepper Radish Tomato	Sow in Hotbed Early Beans Early Beets Brussels Sprouts Early Cabbage Forcing Carrot Cauliflower Celery Eggplant Kohl Rabi Lettuce Parsley Pepper Radish Tomato Open Ground Beans, B. Windsor Beets Carrot Leek Onion Peas Potatoes Radish Spinach Early Turnip	Sow in Hotbed Cucumber Eggplant Melon Pepper Tomato Open Ground Asparagus English Beans Beets Brussels Sprouts Early Cabbage Carrot Cauliflower Celery Cress Cucumber Kohl Rabi Leek Lettuce Melon Onion Parsley Parsnip Peas Potatoes Radish Spinach Early Turnip	Open Ground Artichoke Asparagus Beans, Bush and Running Beets Brussels Sprouts Carrot Cauliflower Celery Sweet Corn Cress Cucumber Kohl Rabi Leek Lettuce Melon Onion Parsley Parsnip Peas Potatoes Radish Salsify Spinach Early Turnip	Open Ground Beans, Lima & all other sorts Beets Broccoli Brussels Sprouts Late Cabbage Carrot Cauliflower Sweet Corn Cress Cucumber Endive Kale Kohl Rabi Lettuce Melon Nasturtium Okra Early Peas Potatoes Pumpkin Radish Salsify Spinach Squash Herbs	Open Ground Beans Beets Carrot Sweet Corn Corn Salad Cress Cucumber Gherkin Kale Kohl Rabi Lettuce Nasturtium Okra Early Peas Pumpkin Radish Spinach Squash White Turnip	Open Ground Beans, Bush Tuberous Chervil Corn Salad Cucumber Endive Lettuce Welsh Onion Early Peas Radish Spinach Turnip Rutabaga	Open Ground Cabbage for Coldframes Cauliflower for Coldframes Tuberous Chervil Corn Salad Cress Siberian Kale Lettuce Mustard Winter Radish Spinach Turnip Sweet Peas

TRY OUR
STONE
TOMATO
FOR
CANNING

WE SUGGEST
A TRIAL OF OUR
CHINESE CABBAGE
AND
SWISS CHARD

SPRAY CALENDAR AND FORMULAS

BITING INSECTS.—Such as Asparagus Beetles, Bean Leaf Beetles, Spring Canker Worms, Caterpillar Codling, Moth, Curculio, Cherry Fruit Fly, Currant Worms, Locusts, Grasshoppers, are best controlled by spraying with either Arsenate of Lead at rate of 1 lb. to 50 gallons of water, or dust with Bug Death. We also recommend Tuber Tonic for the destruction of Potato Bugs and Tomato Worms. Paris Green in mixture with dry Arsenate of Lead or with Hydrated Lime is also an effective remedy for Potato Bugs and Tomato Worms.

SUCKING INSECTS.—Fish Oil Soap sprayed 20 to 25 parts water is effective on **Aphis**, some **Scale Insects**, **Cabbage Flea Beetles**, **Chinch Bugs**, **Bark Lice**. Lemon Oil Insecticide is also effective used on flower plants.

ANTS.—Make holes by driving a stake down 6 inches deep, then pour in about a tablespoonful of Bisulphide of Carbon. Ants on rose bushes and chrysanthemums are not doing any harm to the plant. They are usually going after **Aphis**, which they milk. The **Aphis** should be destroyed. We also recommend Ant-I-Cide for destroying ants on lawns and walks.

APPLE.—**San Jose Scale**, **Oyster Shell Scale**.—Use Lime-Sulphur Solution, 1 gallon to 10 gallons of water, in the fall or winter, preferably in the fall; if badly infested, apply twice. **Apple Scab**, **Bud Moth**, **Curculio** and **Canker Worm**.—Spray with Lime-Sulphur, 1 gallon to 40 gallons of water, and add 2 to 3 pounds of Arsenate of Lead to each 50 gallons. Apply when the color shows in the bloom, but before the bloom opens. For **Codling Moth** spray just after the bloom has fallen with Lime-Sulphur, 1 gallon to 40 gallons of water, and add 2 pounds of Arsenate of Lead to each 50 gallons. The worms enter the apple at the blossom end and each cup must be filled with spray. Do the work thoroughly. Spray again in 40 to 50 days for the second brood of Codling Moths, which appear at this time. If Bitter Rot or Black Rot should show in the orchard, spray with Lime-Sulphur, 1 pound in 50 gallons of water.

BLACKBERRIES.—Anthracnose and Rust. Cut out and burn any diseased canes. Spray with Lime-Sulphur, 1 to 40, or with Insecto (Bordeaux-Arsenate).

CHERRY.—Forbes or Cherry Scale.—Spray with Lime-Sulphur in the fall and winter. For Brown Rot spray with Lime-Sulphur, 1 gallon to 40 gallons of water, and add 2 to 3 pounds of Arsenate of Lead to poison the Curculios. Spray again about 10 days after the fruit has set. Slugs often eat the surface of the leaves early in June; spray the trees with Black Leaf Forty or Arsenate of Lead.

CHRYSANTHEMUM.—**Aphis**.—Use Tobacco Dust or spray with Black Leaf Forty. For **Blight** use Bordeaux.

CURRENT.—**Leaf-blight**.—Apply Sulphate of Copper Solution when injury first appears. After fruit is harvested apply Bordeaux Mixture. **Green Current Worm**.—Use Arsenate of Lead. **Borers**.—Cut out and burn infested stems early in the spring.

GOOSEBERRY.—**Mildew**.—Before buds break, Bordeaux Mixture. For **Worms**, dust with Arsenate of Lead or Bug Death.

GRAPES.—In the spring gather and burn all dead wood and dried fruit of the previous season. Spray with Bordeaux Mixture as the buds are swelling. About 10 days later spray with Bordeaux. Spray again after the fruit has set and every two weeks until fruit is nearly full grown.

MAPLE.—**Caterpillars**.—Collect and burn egg rings in fall and winter. If practical, spray Arsenate of Lead after first leaves appear. **Borers**.—Insert wire in hole and kill, or inject Bisulphide of Carbon in the hole and close with putty or sticky clay. Band the trees with Tree Tanglefoot.

HARDY SHRUBS.—Where affected with Blight, use Bordeaux Mixture two or three times in the spring. For **Leaf-eating insects**, Bordeaux Lead. **Scale**.—**Lime-Sulphur** Solution in fall or winter.

ONION.—**Maggot**.—Destroy the young plants affected as soon as noticed, digging up maggots with the roots. Use Fish Oil Soap in dilution over plants.

PEACH, APRICOT AND PLUM.—For **Peach-leaf Curl** spray in the spring before the buds open with Lime-Sulphur 1 gallon to 15 gallons of water. For **Brown Rot** and **Peach Scab** spray with 1 gallon of Lime-Sulphur to 75 gallons. Spray before bloom opens and again about 10 days after it has fallen. Spray again 30 days with the Lime-Sulphur 1 to 75.

PEAR.—**Blight**.—Cut out and burn all affected branches six inches below blighted part. For **Pear Scab** and **Codling Moth** spray as recommended for the apple.

QUINCE.—If twigs blight, cut out and burn all those affected. Spray with Lime-Sulphur and Arsenate of Lead as for apple after bloom has fallen.

ROSES.—**Leaf-curl** and **Blight**.—Bordo Lead, apply twice. For **Green-fly** or **Aphis**, Arsenate of Lead before the buds form; afterward, Lemon Oil Insecticide or Black Leaf Forty. For **Slugs**, Arsenate of Lead.

STRAWBERRIES.—**Leaf-blight**. **Mildew**.—When growth begins in spring, Bordo Lead. When first fruits are set, repeat. After fruit is harvested, repeat every two weeks.

TOMATO.—**Leaf-blight**.—As soon as disease is discovered, Insecto; repeat every week or 10 days. **Rot**.—Train the vines, giving as much sunlight as possible. Sow seed at different times, so as to have two or three plantings. Pick infected fruit.

SAN JOSE SCALE.—They can be controlled by spraying Lime-Sulphur Solution in the fall, winter and early spring months while the tree is dormant, 1 gallon to 10 gallons water, and it is best to spray twice. In the summer this strong solution cannot be used on account of the injury to foliage and fruit, but even weaker solution, 1 gallon to 30 or 40 gallons of water, seems to have beneficial effect.

SHADE TREES.—For **Scale Insects** spray in fall or winter with Lime-Sulphur and Bordeaux-Arsenate. For leaf-eating caterpillars use Arsenate of Lead. For **Borers** use a wire and pole through burrows, or pour Bisulphide of Carbon in the hole and stop up with mud or putty to keep in the fumes.

1869

P. MANN & COMPANY

1920

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It takes quite a measure of faith and confidence on the part of a customer to buy seed and then wait for an entire season to learn what the results will be. We are happy to state that P. MANN & COMPANY have been able to maintain a standard of quality and perfect service in all these years, holding the respect and confidence of thousands of patrons throughout Maryland, Virginia and near-by counties.

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P. MANN & COMPANY invites you to make use of this catalog as a complete guide in selecting seeds and implements to fill your requirements for the coming season, and further suggests that you ORDER EARLY to avoid unforeseen delays and disappointments that usually follow in the wake of late orders.

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Write your Name, Post-Office, County and State as clearly as possible.

Use the Order Sheet—fill in Quantity, Name of Article and Price in the order as given in the Catalog, and always keep a copy of your order. Write your instructions at the end of order—not between the items.

Remittances should be made by Post-Office Orders, or by Express Money Orders, Registered Letter or Draft on New York.

SHIPMENTS—Seeds and Bulbs can be sent by Parcel Post at the same rates as general merchandise, or they can be forwarded by Express at 20 per cent less than merchandise rates. Seeds in bulk, Implements and other heavy goods are shipped by freight, and unless there is a freight agent at point of destination, the freight must be prepaid; the purchaser advances the same, unless otherwise arranged.

As the season advances some stocks of Seeds are exhausted, so it is advisable when late orders are sent to name a few substitutes. We make substitution only when requested to do so. If not so instructed, the remittance will be refunded.

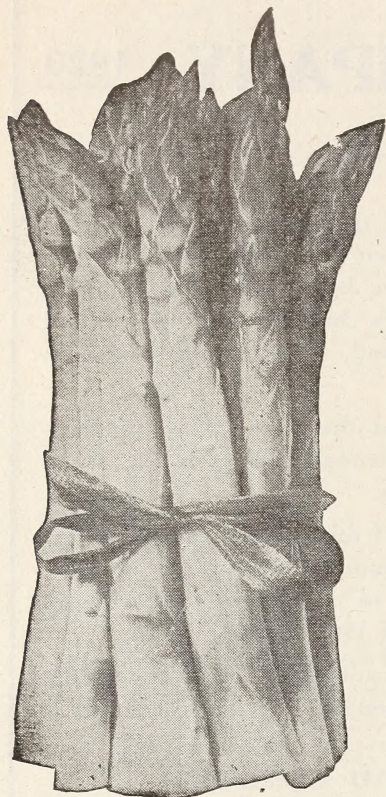
We do not warrant in any way, express or implied, the contents or description, quality, productiveness or any other matter of any Seeds, Bulbs or Plants sold by us, and we will not be in any way responsible for the crop. If the purchaser does not accept goods on such terms, he must return them at once, and money will be refunded.

Catalogs are sent free to all our customers of the past year. Please advise us promptly of any change of address, so you will not fail to receive your copy promptly.

P. MANN & COMPANY

207 SEVENTH STREET, N. W. - - - - WASHINGTON, D. C.

ESTABLISHED SINCE 1869



Palmetto Asparagus

ASPARAGUS

One ounce will sow 50 feet of drill; 4 to 5 pounds to the acre.

CULTURE.—Sow in April or May, in rows 1 foot apart, and keep clean by frequent hoeing. When two years old transplant into permanent beds, which should be well and deeply manured, and trenched to the depth of 18 inches. On the approach of winter, cover with manure or compost; fork the beds early in spring and apply a dressing of salt or kainit at the rate of 600 pounds an acre. Cut for use the second year after planting.

PALMETTO.—A very early maturing and prolific variety, producing an abundance of very large, deep green shoots of the best quality. SEED—Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 25c. Pound, 75c. ROOTS—75c per 100; \$6.00 per 1,000.

CONOVER'S COLOSSAL.—This sort is one of the largest and most extensively used green varieties. Shoots bright green, sometimes tinged with purple at the top, very tender and of the best quality. SEED—Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 25c. Pound, 75c. ROOTS—75c per 100; \$6.00 per 1,000.

COLUMBIAN MAMMOTH WHITE.—Introduced by us in 1893. Furnishes shoots of exceptionally large size and of superior tenderness and flavor. Color clear white until four to six inches above the surface. A large proportion of the seeds will produce white shoots, and the green ones can be easily rejected when setting out the permanent bed. SEED—Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 25c. Pound, 75c. ROOTS—85c per 100; \$6.00 per 1,000.

ASPARAGUS KNIVES.—40c each. By mail, 45c each.

BEANS—Krup-Bohnen, Ger.

DWARF or BUSH GREEN POD

Prices Subject to Change Without Notice. One Quart will plant 100 feet of Drill.

CULTURE.—Dwarf Beans may not be safely planted until the middle of April, owing to the late frost, but may be planted thereafter as desired, until the middle of August.

Select high, rich soil, make drills two feet apart, drop beans along the rows and cover with earth. Hoe often to keep earth to the stems.

IMPROVED EXTRA EARLY RED VALENTINE.—Is the favorite sort for growers who supply the early markets, because its growth is so rapid, and because it stands shipment perfectly. It is a heavy cropper, and ready to pick in about forty days. Pint, 30c. Quart, 50c. Peck, \$3.50. Bushel, \$12.00.

KING OF THE EARLIES.—Possesses all the merits of the Red Valentine, and in addition has other valuable points. The pod is fully one-third longer than the Red Valentine and is perfectly round and straight; of a beautiful green color. Pint, 30c. Quart, 50c. Peck, \$3.50. Bushel, \$12.00.

EXTRA EARLY REFUGEE.—The pods are fleshy and of fine quality; very hardy. Pint, 30c. Quart, 50c. Peck, \$3.50. Bushel, \$12.00.

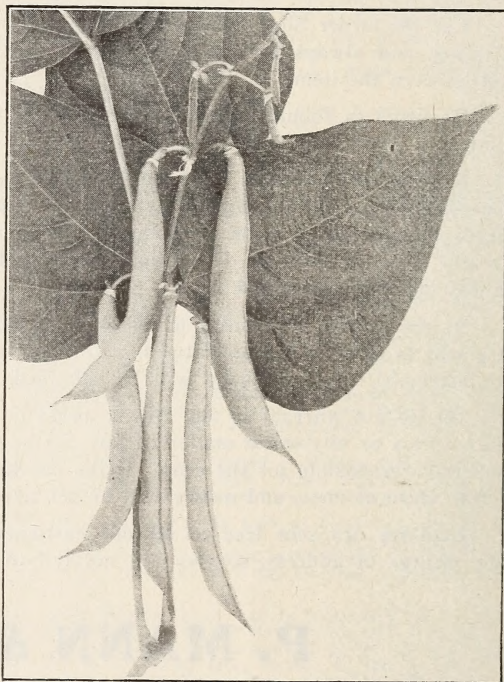
NEW BOUNTIFUL.—A new greenpod Bush Bean, which comes into bearing very early and continues almost throughout the season. Absolutely stringless; good shell bean for winter use. Pint, 30c. Quart, 50c. Peck, \$3.50. Bushel, \$12.00.

BURPEE'S STRINGLESS GREEN POD.—This new bean produces a vine similar to Red Valentine, but develops pods to edible condition two or three days earlier than the Valentine; that is to say, in thirty to thirty-one days from germination, which extraordinary maturity for table at once advances the Stringless Green Pod to the first rank among table beans. Pint, 35c. Quart, 60c. Peck, \$3.60. Bushel, \$13.00.

DWARF HORTICULTURAL.—Large, green pods, splashed with carmine. Excellent either as snaps in the green state, or shelled green or dry. In this neighborhood it is one of the very best selling beans on the market. Pint, 35c. Quart, 60c. Peck, \$3.75. Bushel, \$13.00.

WHITE PEA or NAVY.—Boston Baking Bean. Price, pint, 25c. Quart, 40c. Peck, \$2.50. Bushel, \$9.00.

If beans are ordered by mail or express prepaid, add 6c. per pint, 8c. per quart, for charges.



Improved Red Valentine

WAX or BUSH BEANS

REFUGEE WAX, KEENEY'S STRINGLESS.—

This new variety of dwarf Wax Bean is an improved type of the Refugee Wax. The plants are of very robust growth and extremely early and productive, bearing profusely the large, beautiful pods, which are of delicious flavor. The pods are round, pencil-like. The color is a rich, golden yellow and the quality is excellent. Pint, 35c. Quart, 60c. Peck, \$3.60. Bushel, \$13.00.

BLACK WAX, IMPROVED PROLIFIC.—One of

the finest Snap-shorts and the oldest of the wax varieties; pods transparent, waxy yellow, and snap like pipestems; boil as rich as butter, and when highly seasoned are luscious; they are thick and very tender, entirely stringless and fully as early as the Valentine. Pint, 35c. Quart, 60c. Peck, \$3.60. Bushel, \$13.00.

IMPROVED GOLDEN WAX (Rust-proof).—

This variety, the pods of which are of a dark, rich golden-yellow color, is rapidly surpassing the famous Golden Wax, which has been the most popular and most desirable of all Wax varieties. Pint, 35c. Quart, 60c. Peck, \$3.75. Bushel, \$13.00.

DAVIS KIDNEY WAX.—An excellent rustproof market bean. One of the main points of its superiority over other sorts is its extreme hardness and excellent keeping qualities. The dry bean is white. Pint, 35c. Quart, 60c. Peck, \$3.60. Bushel, \$13.00.

CURRIE'S RUST-PROOF.—Pods long, flat and straight, of a beautiful golden color. Price, per pint, 25c. Quart, 50c. Peck, \$3.75. Bushel, \$14.00.

WARDWELL'S KIDNEY WAX.—This standard variety, maturing a little later than Golden Wax, yields a large crop of long, nearly straight, broad, light golden yellow, handsome pods. These are of large size, about six inches long, and are of good quality. They always command a ready sale, making the variety one of the most profitable for the market gardener as well as shipper. This is also very extensively used for snaps for the home garden. The plants are strong growing and bear their long pods well up from the ground. The leaves are large, broad and slightly roughened. Seed large, flattened, kidney shaped, white with dark markings about the eye. Pint, 35c. Quart, 60c. Peck, \$4.00. Bushel, \$15.00.

POLE BEANS

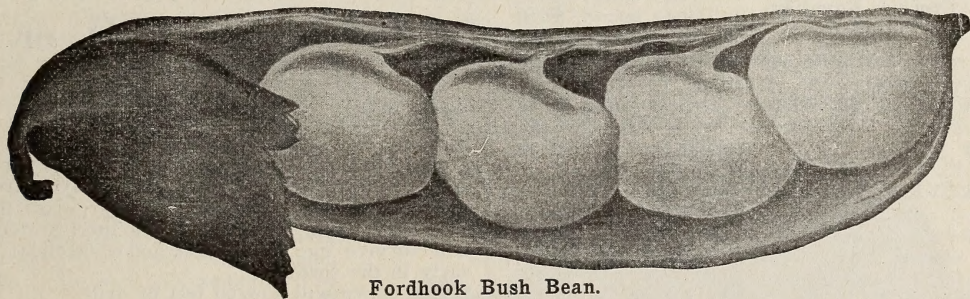
LAZY WIFE'S POLE BEAN.—The pods grow from six to eight inches long, entirely stringless, of a rich, buttery flavor when cooked. Pods retain their tender, rich flavor until nearly ripe. A good white shell bean for winter use. Pint, 40c. Quart, 70c. Peck, \$4.25. Bushel, \$16.00.

SPECKLED HORTICULTURAL, or CHERRY.

—Very productive; equally good in green state or

when shelled. Pint, 35c. Quart, 60c. Peck, \$3.75. Bushel, \$13.00.

KENTUCKY WONDER, or OLD HOME-STEAD.—We regard this variety as being the most desirable, best and earliest of all the green-podded running beans. Pint, 30c. Quart, 50c. Peck, \$3.50. Bushel, \$12.00.



Fordhook Bush Bean.

DWARF LIMA BEANS

BURPEE'S IMPROVED BUSH LIMA.—This is claimed by the introducers to be superior to the old standard Burpee's Bush Lima. Grows more vigorous, with heavier foliage; matures sixteen days earlier. Beans are larger and of better quality. It is the earliest of the large Bush Limas. Vines are very prolific. Pint, 40c. Quart, 70c. Peck, \$4.25. Bushel, \$16.00.

DREER'S BUSH LIMA.—Possesses all the good qualities of the Dreer's Improved Pole Lima, which has long been admitted to be one of the best quality. It is of true bushy habit, growing vigorously about two feet high. Pint, 40c. Quart, 70c. Peck, \$4.25. Bushel, \$17.00.

FORDHOOK'S BUSH LIMA BEAN.—The only stiff, erect bush form of the Potato Lima. Both pods and beans are twice the size of the Kemerle or Dreer's Bush Lima. Pint, 45c. Quart, 80c. Peck, \$5.00. Bushel, \$18.00.

POLE LIMA BEANS

Stangen Bohnen, Ger. 1 quart to 150 hills

FORD'S MAMMOTH.—The pods grow to an average length of eight inches, are produced in great clusters, with from five to seven beans per pod, of most excellent quality, for using either green or dry. Pint, 35c. Quart, 60c. Peck, \$4.00. Bushel, \$15.00.

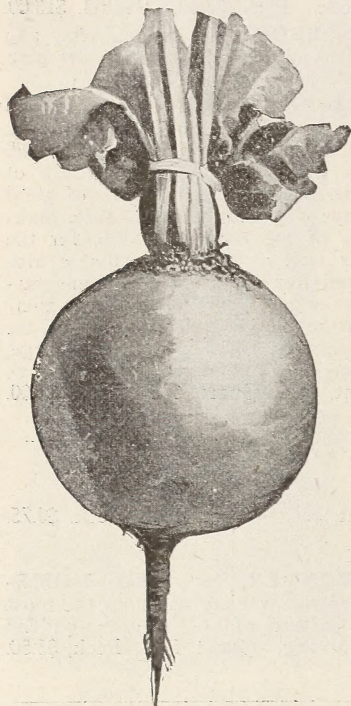
KING OF THE GARDEN LIMA.—The vines of this standard pole lima are very vigorous and productive. The pods are medium dark green, very large, five to six inches long, broad, flat, filled with four or five very large white beans of finest quality. Pint, 35c. Quart, 60c. Peck, \$4.00. Bushel, \$15.00.

CARPINTERIA LIMA.—A new variety, producing beans of largest size, with a greenish tint, which is so much desired both for market and family use. The beans are of the very finest quality, thin skin, extra tender, and of the finest flavor. Vines vigorous, strong, very productive; pods 5 to 6 inches long, closely filled, usually with four to five beans. Splendid for home use or market garden. Pint, 35c. Quart, 60c. Peck, \$4.00. Bushel, \$15.00.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

GARDEN BEETS

CULTURE.—If wanted very early, sow in hot-beds and transplant. For general use, plant seed as early as ground can be nicely worked, usually about first of April. Sow in drills 1 foot apart, about 1 inch deep and thin out to 2 inches apart in rows. One ounce of seed to 50 feet of drill; 6 to 8 pounds per acre.



Crosby's Egyptian.

CROSBY'S EGYPTIAN.

This variety is as early as the original Egyptian, but by careful selection has been made thicker and of better quality. For early use, either for market or for family gardens, this variety easily takes the lead. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

CRIMSON GLOBE.—A second early variety, somewhat oblong in shape, with smooth skin and very dark flesh. Good quality. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

EARLY ECLIPSE.

Very early, dark red color, small 40c; pound, \$1.50. top and free from

fibrous roots; will grow without thinning the plants. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.

DETROIT DARK RED.—Very early and an excellent keeper. Tops small. Roots dark red and globular in shape. Tender and sweet. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

IMPROVED EARLY BLOOD TURNIP.—An improved variety of the Early Blood Turnip; of deep, blood-red color; fine form and flavor. An excellent market sort. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

EXTRA EARLY BASSANO BEET.—This beet is sometimes called Philadelphia Sugar Beet. Roots large, turnip shape; come very early and are very sweet and tender; one of the leading varieties in this market; flesh bright light red. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

EDMAND'S TURNIP BLOOD.—Seed grown from originator's choice stock. This variety is thoroughly fixed and uniform in type. The flesh is deep blood-red in color, and exceedingly sweet and tender. It is round, smooth, of good market size, and does not grow over-large. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

DEWING'S BLOOD TURNIP.—This medium early table sort is tender, sweet and a good keeper. Tops medium sized; leaf stems and veins dark red; leaves green. Roots dark purplish red, turnip shaper with medium-sized top. Flesh carmine with purplish tinge, zoned with lighter shade. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

CROSBY'S IMPROVED EGYPTIAN.—Very early; smooth, globe shaped; dark blood-red. The name of this variety is misleading, as it resembles the Egyptian only in its extreme earliness. The stock we offer is of a distinct dark red color, which

is very attractive, not only in the beets as pulled, but after they have been cooked. They are also more spherical than the Extra Early Flat Egyptian, and we know of no better quality. One of the best for planting early out of doors. It becomes fit for use sooner than any other variety, and is equally suited for forcing in hot-beds or for transplanting. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.

BEETS—(Mangel-Wurzel)

Used for feeding cattle. Sow five pounds per acre.

CULTURE.—Sow in April and May in thoroughly plowed, well manured soil, in drills two inches deep and about 18 inches apart. Thin out to 12 inches and keep the weeds down by frequent hoeing and cultivating. Low ground is best adapted for Mangel-Wurzel.

IMPROVED MAMMOTH LONG RED.—The heaviest cropping and best long mangel. This mammoth variety grows to an immense size, single roots weighing twenty to thirty pounds each, and always of a very fine texture and good quality. $\frac{1}{4}$ pound, 20c. Pound, 50c.

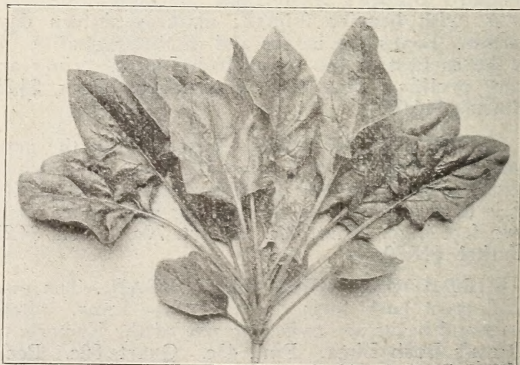
GOLDEN TANKARD.—A distinct variety, particularly valuable on account of its richness in saccharine matter; highly prized by dairymen for its milk-producing qualities. Deep yellow flesh and skin. $\frac{1}{4}$ pound, 20c. Pound, 50c.

SWISS CHARD, or SPINACH BEET

CULTURE.—Swiss Chard is a beet grown for its leaves. The mid-rib when boiled makes delicious greens, or the leaves may be boiled and served as spinach. Sown in the spring the leaves are soon ready to eat, and will continue to grow all through the summer and fall. If given a little protection, it will survive the winter and make excellent greens early in the spring.

One ounce will sow 60 feet of drill.

LUCULLUS.—A new variety with curled leaves like a Savoy cabbage. The plant grows nearly two feet high and the stem and leaves are very large and of fine quality. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.



Swiss Chard, or Spinach Beet.

American-Grown
Selected

CABBAGE

Choux Poenmes, French
Cofy Kohl, Ger.

One ounce will produce about 2,000 plants. One-quarter pound of seed in beds will produce plants for one acre.

CULTURE.—Start your early crop in hot-bed middle of February, covering seed about one-half inch; transplant to cold frames soon as plants are large enough, three or four inches each way. Remove glass part of each day to harden plants and plant out in open ground middle of April. For general crop sow in open ground in June in hills three feet apart.

EARLY VARIETIES, POINTED HEADS.



Early Jersey Wakefield.

SELECTED JERSEY WAKEFIELD.—Many market gardeners consider this the very best early cabbage in cultivation. Certainly deserving of its great popularity. Grown extensively for market and shipping. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

COPENHAGEN MARKET.—The earliest large, round-headed cabbage yet introduced. The heads are of exceptionally large size for so early a variety. The plant is of vigorous habit, but compact, with short stem and few outer leaves which are of rather upright growth. The leaves are medium light green, nearly round, comparatively thick and smooth. The heads are round, very solid and of exceptionally good quality. Its earliness, compact growth, uniformity and size of head, firmness and most excellent quality combine to make Copenhagen Market the most valuable cabbage of recent introduction. We recommend it unreservedly both for the home garden and the market gardening trade. Packet, 10c. Ounce, 35c. $\frac{1}{4}$ pound, \$1.15. Pound, \$4.00.

GLORY OF ENKHUIZEN.—This is a Holland product, and has made good in this country wherever it has been planted. Produces a very heavy crop, is quite early, large and round; always extremely solid and fine-ribbed, excelling in flavor almost all other varieties. It is exceedingly tender and has more of the flavor of the "Savoy" cabbage than most other sorts; quite dwarf and compact, allowing close planting. Heads ball-shaped and with few outside leaves. Color is a lightish green. Packet, 10c. Ounce, 35c. $\frac{1}{4}$ pound, \$1.15. Pound, \$4.00.

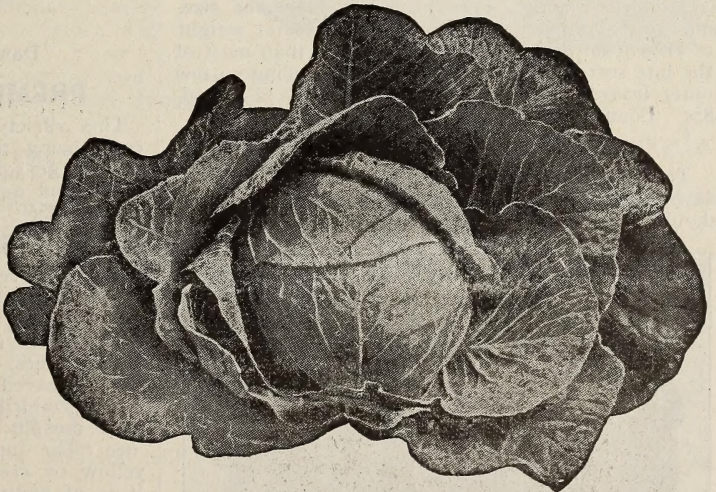
LARGE WAKEFIELD, or CHARLESTON WAKEFIELD.—Selection from Early Jersey Wakefield, only it is about one week later than that popular early variety, but grows much larger, heads often averaging 15 to 18 pounds. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

EARLY YORK.—A well-known variety, of small size; shape roundish oval. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

HENDERSON'S EARLY SPRING.—This variety is nearly as early as the Jersey Wakefield, but the heads are of the round, flat type of Early Summer. It has very small outer leaves, short stem and very small heart, making almost entire head fit for use. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

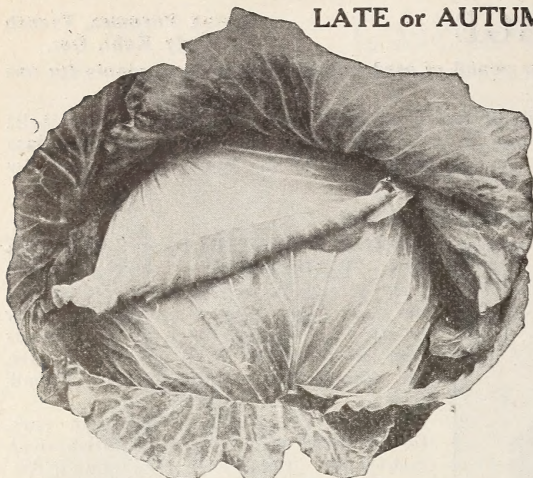
HENDERSON'S EARLY SUMMER.—About 10 days later than the Early Wakefield, but being fully double the size, it may be classed as decidedly the best large Early Cabbage, and is deservedly popular with market gardeners. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

EARLY FLAT DUTCH.—An excellent second early variety, producing fine, large heads after the first early varieties have disappeared. Highly valued both for its fine quality and ability to stand the hot sun and dry weather. Heads very solid, broad and round, flattened on top, tender and fine grained. Pkt., 10c. Oz., 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.



ALL-HEAD EARLY.—A thoroughbred sort, especially recommended on account of its uniform size and shape and reliability for heading. Makes a deep, flat head, solid and uniform in color, shape and size. In tenderness it is unsurpassed. Can be grown either for summer or winter use. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

LATE or AUTUMN AND WINTER SORTS



Late Flat Dutch Cabbage

DANISH BALL-HEAD, or HOLLANDER.—A very solid, hard-heading, heavy variety; an excellent keeper. Packet, 10c. Ounce, 30c. $\frac{1}{4}$ pound, \$1.00. Pound, \$3.50.

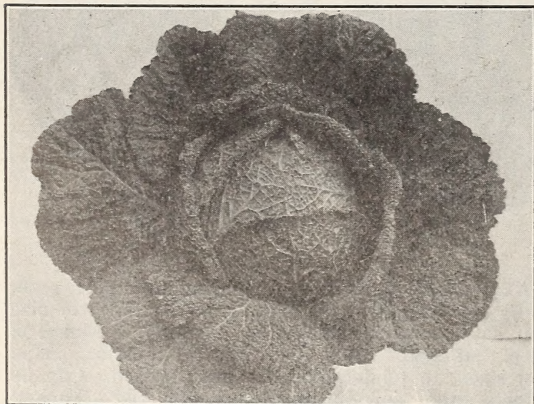
VOLGA.—A main crop sort, very desirable where large, uniformly round heads with short stem and plants of compact growth are wanted. This sort matures very early for a variety furnishing such large heads of excellent shape. The outer leaves are thick, long, oval and rather smooth. The variety is hardy, usually very solid and a good keeper. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

ALL SEASONS.—Heads very large, round, solid and of fine quality, keeping as well as the winter sorts. Plant very vigorous, but sure heading. Remarkable for its ability to stand the hot sun and dry weather. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

AUTUMN KING, or WORLD BEATER.—One of the finest strains of Late Cabbage ever offered. It produces regular, even heads of enormous size, and can be relied upon to produce a greater weight of crop from the same space of ground than most of the late sorts, from the fact of its producing so few outer leaves. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

SAVOY CABBAGE

The Savoy or Curly Cabbages are of much finer flavor and quality than the best of other kinds, and should be more generally cultivated. They are par-



Savoy Cabbage

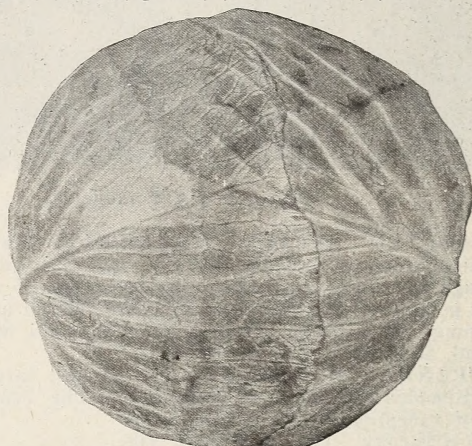
ticularly adapted for private use, where quality rather than quantity is considered. Grown in the fall and allowed to be touched by frost, it is a most delicious vegetable.

IMPROVED AMERICAN SAVOY.—Far superior to the ordinary Drumhead Savoy offered under different names. Heads large and very finely curled; short stalk, compact grower; sure header; keeps well. The best of all Savoys for home use or market. Packet, 10c. Ounce, 30c. $\frac{1}{4}$ pound, \$1.00. Pound, \$3.50.

SUREHEAD.—The heads are of Flat Dutch type, uniform in shape and size, solid and heavy. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

MAMMOTH ROCK RED CABBAGE

(Extra Selected).—Although many so-called new varieties have been introduced, there is none, we believe, superior to our strain of Large Red Drumhead. Wherever tried it has given universal satisfaction. Heads are large, round, very solid and of a deep red color. Ninety-five per cent will form extra fine heads. Excellent for pickling. Packet, 10c. Ounce, 45c. $\frac{1}{4}$ pound, \$1.35. Pound, \$5.00.



Danish Ball-Head, or Hollander.

PREMIUM LATE FLAT DUTCH

This variety is largely grown for late or main crop, being the favorite market variety. Heads very large solid and broad, with flat tops; of fine flavor and quality; very short stems. Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

CHINESE IMPROVED, or PE-TSAI

The improved strain we offer resembles when well grown Cos Lettuce rather than Cabbage. It is often called Celery Cabbage on the market.

The leaves of the plant when young are crimped at the edges, of light green color and appear like smooth-leaved mustard, but with much broader and heavier midribs. The plant as it matures becomes more upright and forms heads much like Cos Lettuce. The inner leaves blanch an attractive light yellow or creamy white with very white midribs. It is of distinctive flavor, very mild and pleasant. It is served as a salad like lettuce or cooked like asparagus.

Sow in this latitude after July 1st at the same time as turnips. The early plantings of Pe-Tsai run quickly to seed in hot weather. Sow in drills 14 to 20 inches apart and thin seedlings two or three times; or, if grown for the market, start in boxes and transplant like late cabbage. Packet, 10c. Ounce, 30c. $\frac{1}{4}$ pound, \$1.00.

CARROTS

One ounce to 150 feet drill. Two and one-half pounds to acre.

CULTURE.—Follow directions given for Beets and Parsnips, as there is no difference in the method of cultivating these roots.

EARLY SCARLET HORN.—Small, but early. Best for forcing. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.00.

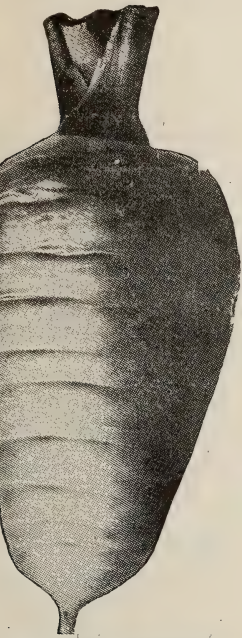
DANVERS HALF-LONG STUMP-ROOTED.—A new variety, of decided merit; rich in color and of handsome shape. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

DANVERS HALF-LONG POINTED ROOT.—Early and very beautifully shaped; very rich in color and best for main crop. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

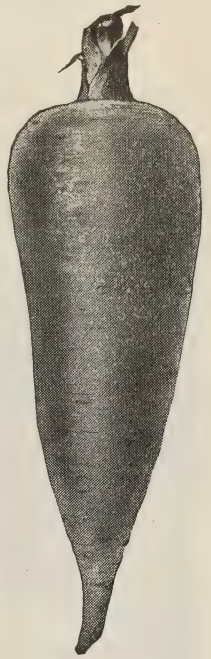
CHANTENAY, HALF-LONG.—Resembles the Nantes, with larger shoulders; medium early and heavy cropper; one of the best for market. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

IMPROVED LONG ORANGE.—Deep orange color; long, smooth; popular for general crop. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

ST. VALLERY, or NEW INTERMEDIATE CARROT.—One of the best main-crop carrots. It is noted for its smoothness of shape, its tenderness of flesh and beauty of color. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.



Danver's Half-Long Point-Root Carrot.



Half-Long Chantenay.

CORN SALAD—Ackersalat

One ounce will sow about eighteen square feet, and six pounds will sow an acre.

BROAD-LEAVED (Large-Seeded).—A delicious salad, used during the winter and spring months as a substitute for lettuce, and is also cooked and used like spinach. Sow in spring in drills 1 foot apart. It will mature in 6 weeks. For early spring use sow in September and winter over like spinach. Packet, 5c. Ounce, 25c. $\frac{1}{4}$ pound, 75c. Pound, \$2.50.

CRESS or PEPPER GRASS

EXTRA CURLED.—The most popular variety for market; excellent flavor. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 25c. Pound, 75c.

WATERCRESS.—Cultivated by sowing the seed by running water or near a spring which is not severely frozen through the winter. Packet, 10c. Ounce, 30c. $\frac{1}{4}$ pound, \$1.00.

COLLARDS

GEORGIA, SOUTHERN, or CREOLE.—This is the white or green-stemmed variety, growing 2 to 3 feet high and forming a large, loose, open head, or cluster of leaves, with a rather long stem. A frost, if not too severe, will improve rather than injure the quality of the leaves. Sow thickly in drills in rich ground, transplanting when 4 inches high, or sow in drills where the plants are to remain, and when well started thin to 2 or 3 feet apart in the row. In the South seed may be sown from January to May and from August to October. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 20c. Pound, 60c.

CHICORY

Sow early in spring, in good mellow soils, in drills half an inch deep and 12 inches apart.

LARGE-ROOTED BAGDEBURG.—The leaves when blanched make an excellent salad. Packet, 5c. Ounce, 25c. $\frac{1}{4}$ pound, 90c. Pound, \$3.00.

WITLOOF.—Packet, 5c. Ounce, 30c. $\frac{1}{4}$ pound, \$1.00. Pound, \$3.50.

DANDELION

An early spring salad. Sow early in spring in drills 12 inches apart, and thin out 6 inches in the rows.

IMPROVED FRENCH.—Packet, 10c. Ounce, 50c. $\frac{1}{4}$ pound, \$1.50.



Brussels Sprouts

A class of plants allied to the Cabbage family, producing a great number of sprouts on the main stem of the plant, which are used and prepared as greens. Plant in rich soil in hills 2 feet apart each way. Pkt., 5c. Oz., 30c. $\frac{1}{4}$ lb., \$1.00; Pound, \$3.50.

CELERY—Sellerie

One ounce to 3,000 plants. Ten to fifteen ounces to the acre.

Sow the seed in a well-prepared soil as soon as the ground is in a proper condition to work. Sow in drills and tread the seed firmly in; thin out to an inch apart, and keep the ground well worked and free from weeds. Make the soil very rich with well-rotted manure, which should be dug in deep. A moist, low, rich bottom land or well-drained muck soil is preferable. Set the plants 8 or 12 inches apart. To blanch draw earth around the plants from time to time, taking care not to cover the tops of the center shoots.



New Golden Self-Blanching

Golden Self-Blanching,

French-Grown, Superior Stock, Unsurpassed

We have been furnishing our customers this strain of Golden Self-Blanching Celery for a number of years, and it is pronounced by one and all the finest strain they have ever seen. The color is a rich golden yellow, very solid and tender; flavor is delicious; has large heart; grows medium height, and is without doubt the best early celery on the market. Packet, 10c. Ounce, 50c. $\frac{1}{4}$ pound, \$2.00. Pound, \$7.50.

WINTER QUEEN.—This well-known strain possesses exceptional merit. Grows very thick, solid and heavy stalk, and has a large heart. It is a close, compact grower, and when blanched is a creamy-white color. Packet, 5c and 10c. Ounce, 15c. $\frac{1}{4}$ pound, 50c. Pound, \$1.50.

IMPROVED WHITE PLUME.—An early self-blanching variety, very popular for fall and early winter use. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.25.

DWARF GOLDEN HEART.—Very solid and excellent keeper, and of fine, nutty flavor; the heart, which is large and full, is of a waxy, golden yellow, rendering it very showy for either market or private use. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 50c. Pound, \$1.50.

PERFECTION HEARTWELL.—This is one of the best varieties in cultivation at the present time; the stalks are long and thick, very compact, crisp and of superior flavor. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

GIANT PASCAL.—A green-leaved variety, which developed from the Golden Self-Blanching. Retains the beautiful color, thick, solid, crisp stalks and incomparable flavor of that variety, but is of stronger growth, also larger, producing perfectly blanched stalks. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.00.

CELERY SEED FOR SEASONING.—Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

CELERY PLANTS.—We can supply all the principal varieties in season. Prices on application.

Celeriac or Turnip-Rooted Celery

Grown exclusively for its roots, which, when cooked, sliced and used with vinegar, make a fine salad.

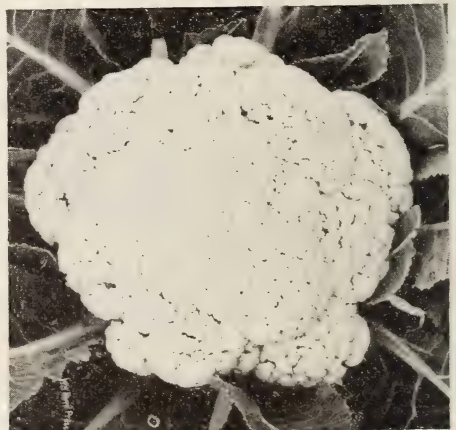
GIANT SMOOTH PRAGUE.—The best variety; large and smooth roots; excellent keeper. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c.

CAULIFLOWER

One ounce produces about 3,500 plants.

EXTRA-EARLY DWARF ERFURT.—Best for forcing and good for open ground. Dwarf and very solid, with short outside leaves. Can be planted 20 inches apart each way and forced. Almost as early as Snowball. Our strain of seed is very choice. Packet, 25c. Ounce, \$2.25. $\frac{1}{4}$ pound, \$8.00. Pound, \$30.00.

EARLY SNOWBALL.—Our strain of this popular variety is unequaled. It is one of the best for forcing under glass or for the open ground. A sure header. Packet, 25c. Ounce, \$2.25. $\frac{1}{4}$ pound, \$8.00. Pound, \$30.00.



Snowball Cauliflower.

CUCUMBER—Gurke

One ounce to fifty hills. One to two pounds to an acre.

CULTURE.—For growth of Cucumbers, hills are raised, standing five feet apart. Quite rich sandy soil is best. If necessary, enrich the hills with a mixture of sandy soil and strong rotted manure. For early use, plant in May; for pickling, plant in June or July. Eight or ten seeds should be allowed to each hill, as the young plants are often destroyed by bugs.

Soon as the plants attain vigor, thin them, leaving the three most promising. If practicable, water during the drought; keep soil loose and free from weeds.

IMPROVED EARLY WHITE SPINE, or ARLINGTON.—A selection from the White Spine, being more pointed at each end. The young fruits are usually crisp and tender, and are of very dark green color, so that the variety is considered by many to be the best for small pickles. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

LONDON LONG GREEN.—The standard late sort, quite crisp and of good size. It is not so early as the Spine, but is more desirable for a late crop. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

THE DAVIS PERFECT CUCUMBER.—As a forcing cucumber, the Davis Perfect has no equal. Its excellent eating qualities, shape, color and productiveness place it without a rival. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

KLONDIKE.—A very early strain of White Spine, with dark green skin, which holds its color a long time. Fruit 6 to 7 inches long and produced in profusion. Quality unsurpassed. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.



White Spine, or Arlington

PERFECTED JERSEY PICKLE.—New and fine. The best pickle. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

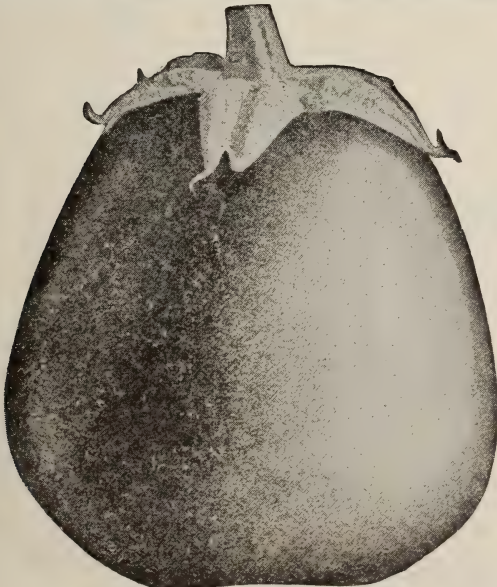
COOL AND CRISP.—A very early and prolific variety. Fruit is long and good shape; dark green in color. It shows knobs bearing spines more than most varieties. It is a good home variety as well as an attractive market sort. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

GHERKIN, or BURR.—Used only for pickling. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

EGG PLANT

One ounce will produce 1,000 plants.

Sow in March in hotbed, and transplant when two inches high into a second hotbed, or let them remain and thin out to four inches apart. When the weather becomes settled transplant into the open ground three feet apart each way. Good culture is quite as important as good seed; work the ground deep; make it rich with well-rotted manure, and hoe often.



Black Beauty Egg Plant.

BLACK BEAUTY EGG PLANT.—The New York Black Beauty combines in itself many characteristics which are very valuable in this vegetable. In the first place, it is very early; in fact, the earliest good market variety. By this we mean it is the earliest variety that grows to a good size suitable for market purposes. Packet, 10c. Ounce, 50c. $\frac{1}{4}$ pound, \$1.75. Pound, \$6.00.

NEW YORK IMPROVED SPINELESS.—Best New Jersey gardeners' selection. Oval shape, thornless, dark purple color and rich flavor. Packet, 10c. Ounce, 50c. $\frac{1}{4}$ pound, \$1.75. Pound, \$6.00.

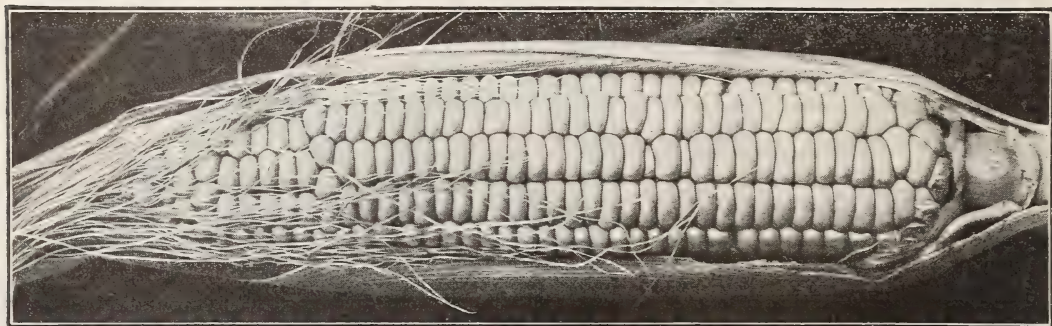
FLORIDA HIGH BUSH.—Has proved a money-maker to Southern growers. It resists drought and wet weather to a wonderful degree on account of its strong, upright growth, the fruits being held well off the ground. Very vigorous and productive, bearing profusely its large purple fruits of fine shape and quality. An excellent shipper. Commission men report they reach market in the best condition and command high prices. Packet, 10c. Ounce, 50c. $\frac{1}{4}$ pound, \$1.75. Pound, \$6.00.

We can supply all kinds of Vegetable Plants in season, such as Tomato, Cabbage, Celery, Sweet Potato, Eggplants, Peppers, Lettuce, etc., by the dozen or hundred.

SWEET or SUGAR CORN

One quart will plant 200 hills. Eight quarts for an acre.

If Corn is wanted by mail or express prepaid, add 5 cents per pint, 10 cents per quart, for charges.



EARLY PREMO

PREMO.—The earliest of all sweet corns; from 5 to 7 days earlier than Extra Early Adams. Remarkably hardy for a sweet corn, and can be planted earlier than other sorts. In quality and sweetness it is all that can be desired of an extra-early corn. Pint, 25c. Quart, 40c. Peck, \$2.25. Bushel, \$8.00.

KENDEL'S EARLY GIANT.—This is not a mere novelty, but is of real merit. Ears large, measuring 8 to 10 inches long, having 10 to 12 rows on each cob; kernels pure white, sweet and tender. Pint, 25c. Quart, 40c. Peck, \$2.00. Bushel, \$7.25.

ADAMS' EXTRA EARLY.—The hardiest and earliest variety for the table use. It can be planted earlier than any other, but it is not a sweet corn; white indented grains and short ears. Quart, 40c. Peck, \$2.00. Bushel, \$7.00.

GOLDEN BANTAM.—Probably the very earliest variety grown. Very sweet; none better for the home garden for first early. Pint, 25c. Quart, 40c. Peck, \$2.50. Bushel, \$9.00.

IDEAL EARLY ADAMS.—A selection and improvement over the old Early Adams. Makes larger and handsomer ears and deeper grains. Ears measure from 10 to 14 inches in length, with 12 or more rows to the ear. Of excellent table quality, and a decided acquisition. Pint, 20c. Quart, 40c. Peck, \$2.00. Bushel, \$7.00.

MAMMOTH LATE.—This produces the largest ear of any, a single ear sometimes weighing 2 or 3 pounds. It ripens a little later than the Evergreen, with larger cobs, the kernels being flatter, not horse-tooth shape. Pint, 25c. Quart, 40c. Peck, \$2.25.

STABLER'S EXTRA EARLY.—A new variety of larger size than usual for the early kinds. It is remarkable for sweetness and earliness. A desirable canning variety. Pint, 25c. Quart, 40c. Peck, \$2.25. Bushel, \$8.00.

COUNTRY GENTLEMAN.—A new corn of merit and desirable for family use. The grains are irregular, compact and sweet. Pint, 25c. Quart, 40c. Peck, \$2.25. Bushel, \$8.00.

WHITE EVERGREEN.—A pure white strain of the popular Stowell's Evergreen. The ears are very large and well filled from butt to tip with long, slender, pure white grains of the most delicious sweetness. It yields two or more ears to the stalk, and they remain in roasting-ear state as long as any corn grown. Pint, 25c. Quart, 40c. Peck, \$2.25. Bushel, \$8.00.

HOWLING MOB.—One of the very best early varieties. Pint, 25c. Quart, 40c. Peck, \$2.25.

BLACK MEXICAN.—Surpassed by none in quality and tenderness. When cooked is almost white.

The ripe ear is black or blue-black. Highly esteemed for family use. Pint, 25c. Quart, 40c. Peck, \$2.25.

STOWELL'S EVERGREEN.—See illustration engraved from a photograph of an ear of our improved strain. The seed which we offer is free from glaze and flint, and has been grown completely isolated from all other varieties. Pint, 25c. Quart, 40c. Peck, \$2.25. Bushel, \$8.00.

KALE or BORECOLE

An ounce of seed will sow about 200 feet of drill. Three pounds to an acre.

DWARF GERMAN GREENS (Siberian Kale).—Generally sown broadcast, but can be sown in drills a foot apart in August. Packet, 5c. Ounce, 15c. ¼ pound, 50c. Pound, \$1.50.

DWARF CURLED GREEN SCOTCH.—Seldom exceeds 18 inches in height, but rounds out to a diameter of 3 feet. The leaves are bright green, tender and elegantly curled. Packet, 5c. Ounce, 15c. ¼ pound, 50c. Pound, \$1.50.

NEW IMPERIAL, or LONG STANDING.—Slow seeder; hardest for gardeners superior to all other sorts in vigorous habit; bright green color. Pkt., 5c. Ounce, 15c. ¼ pound, 50c. Pound, \$1.50.

ENDIVE—Endiven

One ounce to 200 feet of drill. Three pounds to an acre.

CULTURE.—June or July select a bed of good soil, drill fifteen inches apart, sow seed and cover lightly. The plants should not stand closer than twelve inches. Keep the earth to the stems, destroy weeds and hoe liberally.

EXTRA GREEN CURLED.—It is the best. Packet, 5c. Ounce, 15c. ¼ pound, 30c. Pound, \$1.00.

BROAD-LEAVED BATAVIAN (Escarolle).—Used in soups and stews. Requires to be tied up for blanching. Packet, 5c and 10c. Ounce, 15c. ¼ pound, 30c. Pound, \$1.00.

KOHL RABI

One ounce to 200 feet of drill. One and a half pounds to an acre.

CULTURE.—Sow in April in rows 18 inches apart, thinning out to 8 inches between plants.

EARLY WHITE VIENNA.—This forms a bulb above ground, and its flavor mingles the peculiarities of the cabbage and turnip. Packet, 5c. Ounce, 25c. ¼ pound, 75c. Pound, \$2.50.

LETTUCE—Lattich Salat

One ounce will sow 100 square feet, or 120 feet of drill.

CULTURE.—For winter use sow in greenhouse or hotbed and cover seed very lightly. Transplant first to three inches apart and then to eight inches. For outside use sow in rows, covering seed one-quarter inch, the rows eighteen inches apart, then thin out plants to eight inches in row.

IMPROVED BIG BOSTON LETTUCE.

—Identical in color, shape and general appearance as the Boston Market Lettuce, but double in size. It is about one week later in maturing, but its solidity and greater size of head will make it a most valuable sort, desirable either for cold frames or open ground planting. Market gardeners, do not neglect to include some of this seed in your list. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

GRAND RAPIDS FORCING.—There is no better forcing variety among the curled-leaved sorts than the Grand Rapids, and it is quite as good for outdoor culture as other sorts. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

BLACK-SEEDED SIMPSON.—One of the best curled varieties, withstanding the summer heat. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

WAYAHEAD.—Very early, sure-heading and finest quality. Heads very large and solid. Outer leaves light green, inner yellow. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.00.

MAY KING.—A new German variety, fine for forcing and outdoors; heads of medium size, yellowish-green in color; very early and a fine variety. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

DEACON LETTUCE.—Large, solid, long-standing summer lettuce. Heads light green in color, and very pleasing to the eye. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

HUBBARD MARKET.—A large-heading variety, good for either forcing or sowing in open ground. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

NEW GOLDEN QUEEN.—Popular for forcing. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

CALIFORNIA CREAM BUTTER.—Outside leaves are of medium green color, and inside is folded a solid head of rich, creamy-yellow color. It is considered by growers one of the best in cultivation. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

SALAMANDER.—(B. S.)—Compact, tender heads, resisting summer heat. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

BOSTON MARKET, or TENNIS BALL.—This variety is used specially for greenhouse and hotbed culture, because it can be planted very close. It grows very compact, fair size, heads slightly tinged with red on edge of leaves. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

ICEBERG.—A large, crisp lettuce, always tender, stands hot weather remarkably; give each head 14 inches in the row. The color is light green, lightly tinged with brown. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

EARLY CURLED SIMPSON.—Very early, largely grown in cold frames. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

ROMAINE, or COS LETTUCE

NEW TRIANON COS, or CELERY LETTUCE.—The finest of all the Cos sorts; leaves when bleached are stiff like celery stalks, and can be eaten in the same manner. Ounce, 15c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

MUSTARD

The young and tender leaves of the Mustard are greatly relished as salads or when cooked like spinach. The seed should be sown in shallow drills as early as the ground can be prepared in spring, and the leaves cut when several inches long.

WHITE.—Ounce, 5c. $\frac{1}{4}$ pound, 25c. Pound, 75c.

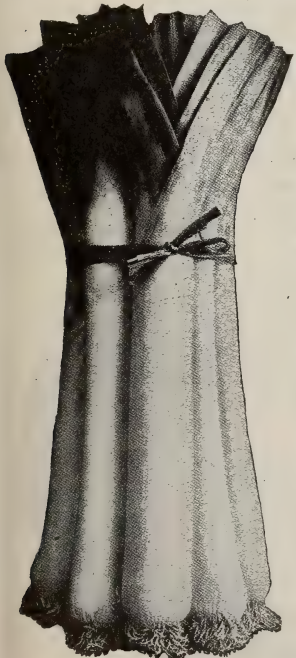
GIANT SOUTHERN CURLED.—Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 25c. Pound, 75c.

LEEK—Lauch

BROAD LONDON, or LARGE AMERICAN FLAG.—Best American-grown seed. Packet, 5c. Ounce, 25c. $\frac{1}{4}$ pound, 75c. Pound, \$2.50.



Big Boston Lettuce



Leek.

CANTALOUPE or MUSK MELON

One ounce will plant about fifty hills. Two or three pounds in hill per acre.

CULTURE.—Plant seed in hills 5 and 6 feet apart each way, 8 to 10 seeds per hill, after danger from frost is past. After plants are well up, thin to 4 to the hill; keep them well cultivated until the runners are so long they cannot be hoed or cultivated. The quality of Musk Melons is affected very much by weather conditions.

KNIGHT CANTALOUPE

A splendid early Cantaloupe of superb quality, and at the same time makes an excellent market or shipping melon.

This new cantaloupe gave the very best results and satisfaction to our customers the past season. Its earliness, productiveness, uniformity in shape and appearance and fine table qualities easily place it in the first class both for home use and market. It matures about a week earlier than the regular Rocky Ford, is larger in size, and makes a most attractive and salable melon. It has thick, green flesh, shading to orange at the center. The fruits are oblong in shape, well ribbed and well netted. Altogether, it is rapidly taking front rank as one of the most desirable cantaloupes in cultivation. Price Knight Cantaloupes: Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

SWEET AIR.—We know from what we have seen of this melon for the past five seasons that we cannot speak too highly of this melon. It is the sweetest, finest flavored, juicest and best melon ever offered. It is a little larger than the Rocky Ford, well netted, thick green flesh, small seed cavity. When the other standard sorts have been flat to the taste this has been perfect in sweetness. Packet, 5c. Ounce, 25c. $\frac{1}{4}$ pound, 75c. Pound, \$2.50.

ACME, or BALTIMORE CANTALOUPE.—Has a beautiful, heavily netted green skin; good size; in shape a desirable and distinct oval, and slightly ribbed; flesh thick, green, very finely flavored and sweet; very productive, and never bursts open at blossom end. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

ROCKY FORD NETTED GEM.—Our stock is specially grown for us in the famous Rocky Ford melon district, and is a particularly valuable strain for shippers. It is uniform in size, thickly netted, distinctly ribbed, firm-fleshed and of most delicious flavor. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

EMERALD GEM.—Medium size, nearly round; flesh a delicate light salmon color, very thick, fine-grained and of most excellent flavor. The rind is thin, dark green, ribbed, but not netted. One of the best for home use. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

BURRELL'S GEM.—Originated in Rocky Ford, Col., the home of the celebrated Rocky, excepting it has a yellow or salmon-colored flesh instead of the green flesh. It grows to a very desirable size, is closely netted, slightly ribbed, with a dark green skin. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

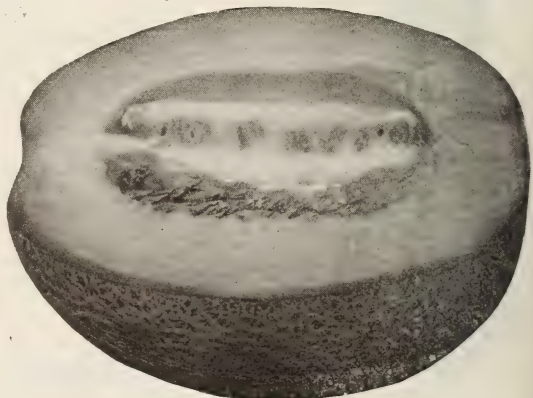
Knight
Cantaloupe.



HONEY DEW.—The delicious honeylike flavor of this new melon has met with instantaneous public favor and created a sensation wherever used. The fruit is of large size, weighing eight to ten pounds each. The rind is perfectly smooth and cream colored. The flesh is from one and one-half to two inches thick, light green in color, very sweet and juicy. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.00.

TIP TOP.—For splendid eating qualities this melon is certainly rightly named, for it is one of the most delicious flavored and finest table melons in existence. It grows to a large size, has thick orange flesh and is sweet, juicy and of the finest flavor even close to the rind. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

EXTRA-EARLY HACKENSACK.—It produces melons equally as large and with all the good qualities of the well-known Hackensack, but two weeks earlier; heavily netted, and has light green flesh of delicious flavor. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.



Extra-Early Hackensack

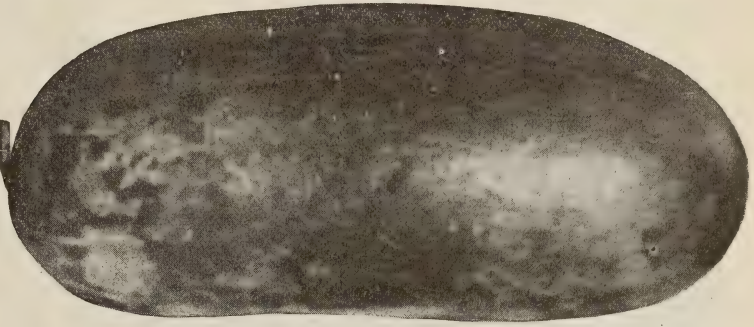
WATERMELON

Those using larger quantities than one pound of Watermelon Seeds should write us for special prices.

CULTURE.—Plant in hills 6 or 8 feet apart in May. Select warm, light, dry ground, and in preparing the hills let them be dug out as broad and deep as the soil will admit; fill at least one-third full of the best decomposed stable manure, and mix thoroughly with the soil; fill up a little above the level of the ground.

HARRIS' EARLIEST WATERMELON.—Sweetest, largest and best shipping early melon. Harris' Earliest Watermelon was originated by crossing Kolb's Gem with Hungarian Honey, Cole's Early and a small

Russian melon of the very finest flavor. The melon is oval to oblong, striped with green and gray; bright red flesh, sweet, tender and delicious. Ounce, 15c. $\frac{1}{4}$ pound, 25c. Pound, 75c.



Tom Watson

	Oz.	$\frac{1}{4}$ Lb.	Lb.
CUBAN QUEEN. —Early, solid, heavy; skin striped dark and light green.....	\$0.15	\$0.25	\$0.65
KOLB GEM. —Very large; flesh red; a good shipping sort; very popular.....	.15	.25	.65
SWEET HEART. —Oval form; mottled light green skin; red flesh.....	.15	.25	.65
FLORIDA FAVORITE. —An oblong melon of fine flavor.....	.15	.25	.75
BLUE GEM, or ICEBERG. —In general size, shape Kolb Gem, but the skin is darker and the quality is superior.....	.15	.25	.75
HALBERT HONEY. —The strong points in favor o superb flavor, sweetness, tenderness and fine table qualities.....	.15	.25	.65
STRIPED GYPSY, or GEORGIA RATTLESNAKE. —A large, oblong melon.....	.15	.25	.75
KLECKLEY'S SWEETS. —This is one of the earliest melons.....	.15	.25	.90
TOM WATSON, NINETY DAYS. —Long, dark gre Kleckley Sweet, and longer; fine variety.....	.15	.25	.75

Each of the above Watermelons, 5c per package.

ONIONS—Zwiebel

Onion seeds should be sown as early as possible to work the ground, in drills one inch deep and twelve to sixteen inches apart, in rich soil, deeply dug and lightly rolled. Thin to one inch apart. When sowing for sets, seeds must be put in very thick, at the rate of twenty pounds to the acre. The same patch may be used year after year for onions and never made too rich.

To raise large onions, select a bed of rich soil, work it deeply and and never made too rich.

Good Onion Seed Is of the Greatest Importance

WHITE SILVER SKIN, or PORTUGAL.—The leading sort of white onion. Skin is of a beautiful, clear white color; flavor mild, and a most excellent keeper. Packet, 5c. Ounce, 25c. $\frac{1}{4}$ pound, 75c. Pound, \$2.50.

RED WETHERSFIELD.—The best-known and most widely used red variety. In shape it is flat-tish, but thick, with very firm flesh; is hard, and an excellent keeper, as well as a heavy cropper. The color is a bright, purplish-red. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.00.

YELLOW GLOBE DANVERS.—The popular yellow globe onion for market and shipping purposes; is almost ball-shaped, but a trifle flattened at both ends. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.00.

SOUTHPORT LARGE WHITE GLOBE.—Packet, 10c. Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

PRIZETAKER.—A superb variety where large size and superior keeping qualities are desired. Color a rich straw and flavor very mild and delicate. Packet, 5c. Ounce, 25c. $\frac{1}{4}$ pound, 75c. Pound, \$2.25.



Prizetaker.

ONION SETS

One quart to fifty feet of row; eight to ten bushels per acre, according to size of sets.



Choice Grown Onion Sets.

All onions attain full size and maturity the same season from spring-sown seed, yet many people desire to plant out sets for earliest Onions for the table or to use green or for bunching.

Our Silver Skin Sets are choice Pennsylvania-grown, and are superior to Western-grown sets this season, which are badly damaged. Prices in quantity upon request.

The price per bushel is subject to change with the market. Write for quotations.

YELLOW ONION SETS.—Grown from our select strain of Yellow Danvers. Pint, 15c. Quart, 25c. Write for our prices for larger quantities.

WHITE ONION SETS.—Grown from our select strain of White Portugal. Pint, 15c. Quart, 25c.

OKRA or GUMBO

CULTURE.—Plant in May, in hills about 3 feet apart, 4 or 5 seeds per hill. When well established, thin out to 2 plants. One ounce to 100 feet of drill; 8 pounds per acre.

PERKINS' MAMMOTH LONG-PODDED.—A very large-podded variety, popular with canners and for home use. Quality very fine; plants extremely productive, of long, slender pods, which remain tender a long time. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 20c. Pound, 50c.

WHITE VELVET.—Pods round, smooth, free from seams, very prolific. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 20c. Pound, 50c.

DWARF GREEN PROLIFIC, or DENSITY.—A very dwarf and prolific variety. Pods green, smooth and thickly set. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 20c. Pound, 50c.

PARSLEY—Pastinake

One ounce to 150 feet of drill.

Sow in rows one foot apart and one inch deep. The seed is slow to germinate and should be given the most favorable conditions. A deep, rich, loamy soil is required. For winter use a few plants placed in a box in the cellar will give a supply.

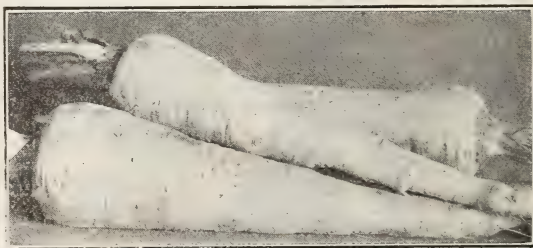
EXTRA-DARK MOSS CURLED.—The large leaves are very heavily crimped and curled, being quite moss-like in appearance and of peculiarly rich, extra dark green coloring. Very productive, and most attractive as a garnish, both on account of this deep green coloring and fine mossy appearance. Packet, 5c. Ounce, 10c. $\frac{1}{4}$ pound, 25c. Pound, 85c.

FINE DOUBLE CURLED.—Plants of dwarf, compact growth, and the young leaves have the edges heavily crimped, being of quite moss-like appearance. Packet, 5c. Ounce, 10c. $\frac{1}{4}$ pound, 25c. Pound, 85c.

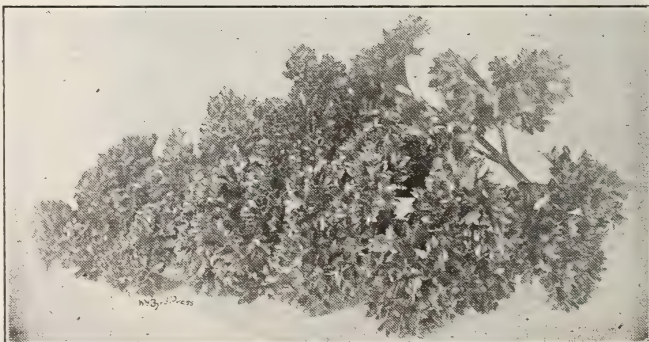
PARSNIPS—Petersilie

One ounce to 150 feet of drill.

Sow as early in the spring as the weather will permit, in drills 15 inches apart and $\frac{1}{2}$ inch deep in rich, well-manured ground, well dug. Cultivate similar to carrots, and thin out to 6 inches apart. To keep well in the ground over winter draw a little earth over the tops.



HOLLOW CROWN, or LARGE SUGAR.—The best variety in cultivation for general use; roots white, smooth, of intermediate length, sugary, of excellent flavor. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 25c. Pound, 75c.



Double Curled Parsley.

PEPPER

One ounce will produce about 2,000 plants.

CULTURE.—Sow in hotbed in April, and in warm, settled weather transplant outdoors 18 inches apart in rows 3 feet apart; or, when all danger of frost is past, sow in open ground and thin.

CRIMSON GIANT.—The largest and finest mild red pepper; double the size of Ruby King. Packet, 10c. Ounce, 60c. $\frac{1}{4}$ pound, \$2.00.

NEAPOLITAN LARGE EARLY.—Earliest of the large sweet peppers. Thick-meated and very productive. Packet, 10c. Ounce, 45c. $\frac{1}{4}$ pound, \$1.50. Pound, \$5.50.

RUBY KING.—Ideal pepper for filling and pepper-hash. Packet, 10c. Ounce, 60c. $\frac{1}{4}$ pound, \$2.00. Pound, \$7.00.

LARGE BELL, or BULL NOSE.—Early, large, red, mild. Packet, 10c. Ounce, 45c. $\frac{1}{4}$ pound, \$1.50. Pound, \$5.50.

LONG RED CAYANNE.—Packet, 10c. Ounce, 40c. $\frac{1}{4}$ pound, \$1.50. Pound, \$5.50.

CHINESE GIANT.—Packet, 10c. Ounce, 60c. $\frac{1}{4}$ pound, \$2.00. Pound, \$7.50.

PIMENTO LARGE SWEET.—Packet, 10c. Ounce, 50c. $\frac{1}{4}$ pound, \$1.65. Pound, \$6.00.



Pimento Pepper.

MAINE - GROWN SEED POTATOES

All of the Seed Potatoes we sell are grown in the State of Maine, where it is universally acknowledged the best seed potatoes are raised, and thousands of carloads are shipped every year from the counties of Holton and Aroostook alone. Farmers and truckers in the Middle and Southern States should renew their seed potatoes at least every two years, as by doing so they will realize the advantage of early maturity and productiveness.

Special prices will be given on application.

SPAULDING ROSE.—Said to be the earliest potato now grown, and especially recommended for early market trade. Grown under favorable circumstances, they are ready for the table at 10 weeks from date of planting, and fully matured at 12 weeks. Medium-sized, very smooth-skinned, shallow eyed, and of fine texture; in color light pink.

OHIO, or XX EARLY.—This is one of the earliest potatoes grown; it will bear heavy manuring with commercial fertilizer; yields well, is free from blight; potatoes come to eatable size very early and eat well.

EARLY ROSE.—For a generation the standard potato of the whole country for earliest yield, thrift, beauty and table qualities, because it always succeeds well in any soil in any climate.

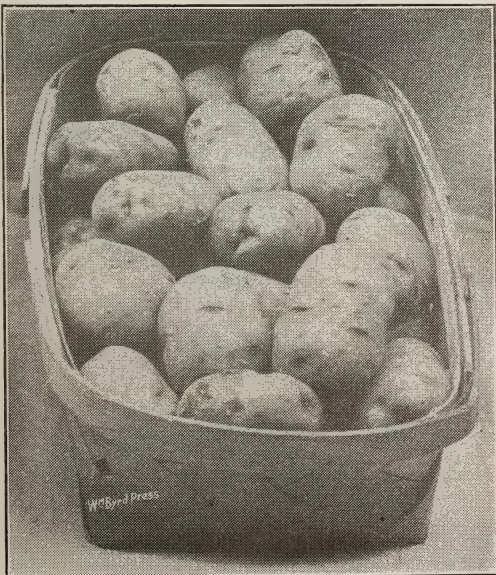
EXTRA-EARLY BOVEE.—A most desirable new potato, introduced several years ago; has become very popular. Reported 12 days earlier than Early Ohio, and is the earliest potato we know of.

McCORMICK.—A very popular late sort; in fact, too well known for us to describe. Plant along in June or July, and you will receive a yield that will surprise you.

IRISH COBBLER.—One of the most reliable first early potatoes ever sent out. It ripens almost with the Early Ohio, and so uniform that every hill seems to ripen all at one time. The value of this feature will be at once apparent to the market gardener who always likes to dig the entire crop at one time and follow with a crop of something else from the same ground.

GREEN MOUNTAIN.—White skin, flat, oval form, smooth, of good appearance; fine for the table when well grown; ripens slowly and is a good keeper; valuable for late crops; now taking the lead in all markets.

SWEET POTATO PLANTS.—Big Stems and Jersey Roots ready about April 1st. Big Stems and Jersey Plants ready about May 1st. Prices quoted on application.



Irish Cobblers.

PUMPKIN—Grosse-Kurbis

One pound will plant 200 to 300 hills.

CULTURE.—The common practice is to drop 2 or 3 seeds into every third or fourth hill in the cornfield; may be sown in hills, 8 feet apart each way, 4 plants to each hill.

CASHAW, or CROOKNECK.—Large, light cream color, solid and sweet, very fine-grained; splendid for table or feeding stock. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

LARGE CHEESE.—A good cooking variety, cheese shape, creamy yellow color, flesh fine-grained, and one of the best for pies. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

JAPANESE PIE.—Crooked-neck variety; extremely small seed cavity; nearly all solid meat; quality extra fine. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

LARGE CONNECTICUT FIELD.—Hardest of all pumpkins, good for pies and stock feeding. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.



Large Cheese Pumpkin

SMALL SUGAR.—Early, prolific and very sweet, orange color; fine keeper. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

KING OF MAMMOTHS.—The giant variety, grows to enormous size; deep yellow, glossy color. Splendid to grow for stock and exhibition purposes. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

PLANT MANN'S SEEDS FOR BETTER RESULTS

GARDEN PEAS

We Do Not Pay
Postage on Peas

Three quarts of seed to 100 yards of row. One and a half to two bushels to the acre.

CULTURE.—Sow as early as the ground can be worked, and again every ten days or two weeks for succession. They can be sown as late as the 20th of August for the last sowing, using Extra Earlies. Sow in rows about 4 feet apart and 1 inch apart in the row and 3 to 4 inches deep.

EXTRA-EARLY ALASKA.—The earliest blue pea. The dark green color of the pods makes it extremely desirable, as it can be carried long distances without losing color, which quality, combined with its earliness and uniformity of ripening, makes

it a most desirable pea for market gardeners. Height 2 feet. Pint, 25c. Quart, 45c. Peck, \$2.75. Bushel, \$10.00.

LITTLE MARVEL.—As regards Little Marvel peas, this variety we can recommend as being one of the very best short-vine peas introduced. The vines are about a foot high, very stocky, and the pods are large and well filled with large peas of excellent quality. We consider this variety far superior to American Wonder or Nott's Excelsior, and when they are better known they will be in great demand. Pint, 45c. Quart, 80c. Peck, \$5.00.

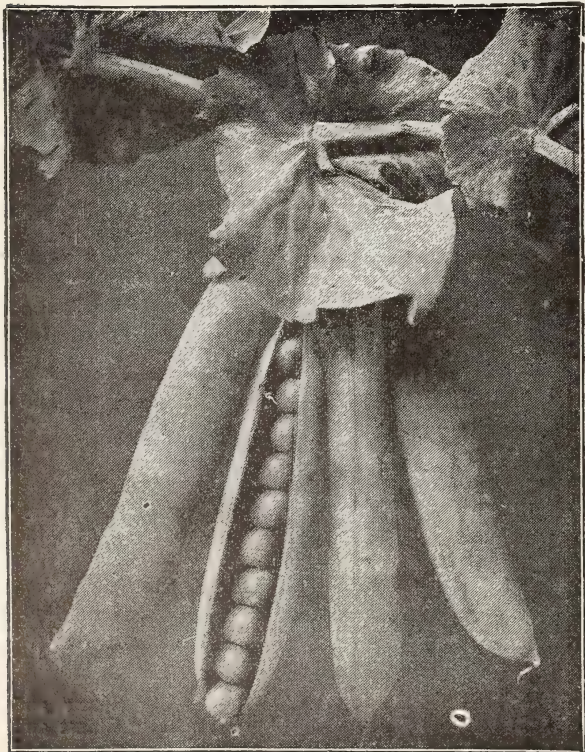
NOTT'S EXCELSIOR.—One of the best early dwarf peas. It combines the good qualities of the American Wonder and Premium Gem Peas. Pint, 35c. Quart, 60c. Peck, \$3.75.

LONG-PODDED ALASKA PEAS.—New, vigorous, handsome, long-podded, delicious flavored Alaska Pea. Bound to become extremely popular, for it has all the good qualities of famous Extra-Early Alaska Pea, and, in addition, it has a well-filled pod almost twice as long, which will fill the basket in one-half the time, and while it is not a distinctly sugar pea, yet it has a much sweeter flavor than the Alaska. It is an abundant yielder. Pint 35c. Quart, 60c. Peck, \$3.75. Bushel, \$13.00.

GRADUS, or PROSPERITY.—Probably the best extra-early pea yet introduced. Only 2 or 3 days later than Alaska, and a wrinkled pea of excellent quality. Pint, 40c. Quart, 70c. Peck, \$4.50. Bushel, \$17.00.

IMPROVED STRATAGEM.—A favorite with market gardeners for a general crop pea, strong vines, immense pods, large peas, heavy cropper, true stock. Pint, 40c. Quart, 80c. Peck, \$5.00.

CARTER'S DAISY, or DWARF TELEPHONE.—A most desirable sort on account of its size, beautiful shape and fine quality. Pods broad and of a pale green color. Height, 20 ins. Pint, 40c. Quart, 70c. Peck, \$5.00. Bushel, \$18.00.



Extra Early Alaska.

PEAS—Continued

NOTICE.—In ordering Peas to be sent by mail, please add 8 cents per pint to pay postage. Prices subject to change without notice.

PREMIUM GEM.—This variety is nearly as early as the American Wonder, and the very productive vine is decidedly larger, growing to a height of from 15 to 18 inches. The pods are large and crowded with 6 to 8 very large peas of fine quality. Pint, 35c. Quart, 60c. Peck, \$4.00.

DWARF WHITE MARROWFAT.—Height $3\frac{1}{2}$ to 4 feet. Peas large, standard variety. Pint, 25c. Quart, 40c. Peck, \$3.00.

THOMAS LAXTON.—An extra-large-podded variety. The plant is a very hardy and strong grower, producing the large-size pods in abundance; quality is delicious and cannot be surpassed. Pods very dark green. Pint, 40c. Quart, 70c. Peck, \$4.25.

AMERICAN WONDER.—This is a dwarf variety, and leads all others in point of earliness, growing about 10 inches high, and produces a profusion of good-sized, well-filled pods, with finest flavored peas. Pint, 35c. Quart, 60c. Peck, \$4.00.

HORSFORD'S MARKET GARDEN.—A first-class wrinkled pea, second early; height 24 inches. Does not require stakes; is profitable sort for market gardeners; a single plant has been known to produce 150 pods. It is equally good for the home table. Pint, 35c. Quart, 60c. Peck, \$3.75.

POTLATCH.—Strong, vigorous vines of even growth. 20 to 24 inches in height, with luxuriant, dark foliage, bearing pods medium green in color, $3\frac{1}{2}$ to 4 inches in length. Broad and pointed at the ends. No variety known will produce more pods, and no pods could possibly shell out better. Fit for table use 61 days from planting. Seed green, wrinkled, large in size. Pint, 45c. Quart, 80c. Peck, \$5.00.

LONG ISLAND MAMMOTH.—The robust habit, profusion of very large and well-filled, deep green pods, combined with the remarkable size and superb flavor of the peas, are qualities which have ensured its popular position. Height, $4\frac{1}{2}$ feet. Pint, 40c. Quart, 70c. Peck, \$4.50.

TELEPHONE, IMPROVED STOCK.—A luscious wrinkled-pea pod, large size and peas excellent quality; an enormous cropper; grows 4 feet high. Pint, 35c. Quart, 60c. Peck, \$4.00. Bushel, \$15.00.

MAMMOTH-PODDED SUGAR (Edible Pods).—This variety grows to the height of 5 feet; bears a profusion of very large, broad, handsome light green (nearly white) pods, which are so brittle that they snap without any strings. Sweet, tender and of excellent flavor. Pint, 35c. Quart, 60c. Peck, \$4.00.

CHAMPION OF ENGLAND (Wrinkled).—A green wrinkled variety famous for its delicious flavor. Consider it one of the finest varieties for family use, and will follow any of the second early varieties in ripening. Pint, 35c. Quart, 60c. Peck, \$4.00. Bushel, \$15.00.

For larger quantities, prices given on application.

Pea crop in 1919 very short; some varieties almost total failure.

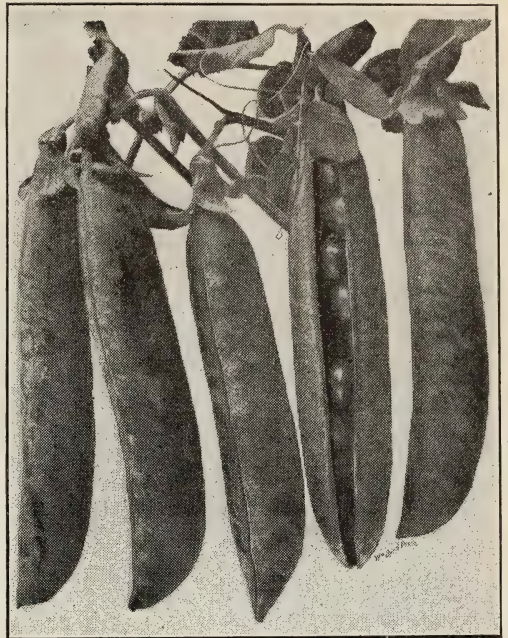
RADISH—Rettich

One ounce will sow 100 feet of drill. Nine pounds will sow an acre.

CULTURE.—Select light, sandy soil, spade deeply and manure well. For early crop, sow in hotbeds in February or March; for main crop, sow at intervals from early spring until last of September in deep, rich soil. Broadcast sowing is allowable, but drilling is more professional; however, radishes do well by either method. Thin when they crowd, or the crop will be imperfect. They may be drawn after a few weeks' growth.

LONG BRIGHT SCARLET, WHITE TIP.—Matures in 25 days from planting, continuing crisp until full grown. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

LONG WHITE ICICLE.—The popular long white radish, very early. The best long white radish. Skin is pure white; flesh crisp and tender, remaining so for a long time. It is very early, maturing in 25 to 30 days. Makes a fine show when bunched for market. Popular with market gardeners. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.



Premium Gem Peas



Telephone

RADISH—Continued

CRIMSON GIANT.—A large globe-shaped variety of recent introduction. Color is brilliant cardinal; flesh firm and tender; matures early; grows to a large size, and is always very crisp and tender. We consider this one of the very best second early forcing varieties. Highly recommended for outdoor planting. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

EARLY SCARLET TURNIP, WHITE-TIPPED.—Early, fine grain and flavor; round with white tip. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

VICK'S SCARLET GLOBE.—A very desirable variety for open ground or forcing. It is nearly olive-shaped; bright scarlet color, of fine quality. Matures very early and does not become unfit for use as soon as many extra-early sorts. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

EARLY SCARLET TURNIP.—The old favorite turnip-shaped radish of medium size, quick to mature; a very desirable variety. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

EARLY LONG SCARLET.—Short tops, long, deep scarlet roots, fine flavor. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 25c. Pound, 75c.

FRENCH BREAKFAST.—A quick-growing, oval-shaped radish, light color and white tip. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

HALF-LONG DEEP SCARLET (Paris Beauty).—Color bright scarlet. Flesh pure white, crisp and juicy. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

LARGE WHITE SUMMER TURNIP.—Excellent for summer use. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

LONG WHITE VIENNA, or LADY FINGER.—This in shape resembles the long scarlet; color snow white. It is of very rapid growth, and remarkably crisp, brittle and tender. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.



White Strasburg Radish



Crimson Giant Radish.

WHITE STRASBURG.—Large white radish, which stands summer heat; handsome shape and pure white color. (See cut.) Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

NEW CHARTIER.—The color at top is crimson, running into pink at middle, and thence downward to pure waxy white. It will attain a very large size before it becomes unfit for use. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

CHINESE WINTER ROSE.—Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

ROUND BLACK SPANISH WINTER.—Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

LONG BLACK SPANISH.—Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

CALIFORNIA MAMMOTH WHITE.—Largest of all the winter radishes and extensively grown by the Chinese gardeners in California. Grows 10 to 12 inches long and from 2 to 3 inches in diameter. Pure white skin and flesh; solid, crisp and of good flavor. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

WHITE SPANISH WINTER.—Large size and a good keeper. Skin and flesh white. Solid, crisp and tender. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

RHUBARB or PIE PLANT

Very familiarly known as the Pie Plant. The foot stalk is the portion that is used, and is the first vegetable of the season from the garden. Sow the seed early in the spring, in rows 1 foot apart, on rich ground. The second year after planting they can be removed, in autumn, to the permanent spot allotted to them. Plant the roots 2 feet apart each way, in ground that is well enriched, at least 2 feet deep.

VICTORIA.—The earliest and best for garden use, not so coarse and fibrous as the larger sorts. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 40c. Pound, \$1.50.

LARGE SIZE ROOTS.—Each, 15c. Per dozen, \$1.50. Per 100, \$10.00.

SALSIFY or OYSTER PLANT

Five to eight pounds to an acre.

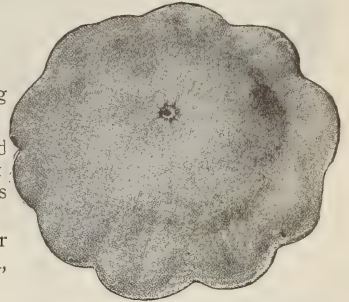
CULTURE.—Sow early in spring in drills 15 inches apart; cover with fine soil $1\frac{1}{2}$ inches deep, thin to 6 inches apart. As soil is strong and inclines to depth and lightness, it proportionately is adapted to Salsify. As the leaves resemble grass, be careful they are not mistaken in weeding. Salsify keeps over winter like parsnips.

SANDWICH ISLAND MAMMOTH.—The most popular salsify in cultivation, and far superior to the old varieties in size, weight and productiveness. A stronger grower, with large, long, white tapering roots; without tendency to branch. We have taken great care in the selection of our seed stock so as to produce not only good size, but the smoothest roots possible, qualities that will be appreciated both by market and private growers. (See cut.) Packet, 5c. Ounce, 25c. $\frac{1}{4}$ pound, 75c. Pound, \$2.50.

SQUASH—Kurbis

Bush sorts, 1 ounce for 50 hills. Running varieties, 3 to 4 pounds, in hills, for an acre.

CULTURE.—After the weather is settled and warm, plant in hills 5 to 8 feet apart. Rich soil is best, but if necessary, the hills alone may be enriched.



EARLY WHITE BUSH SCALLOPED, or PATTY PAN.—The best for early market use. Preferred for table. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

SUMMER CROOKNECK.—Early, fine flavor; a desirable table sort. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.25.

BENNING BUSH.—Earlier than the White Bush; color very light shade of green; bush habit; very productive and attractive appearance. The improvement of the Benning Bush Squash over the old sort is quite distinct, in that it is earlier and has a very beautiful light shade of green color, in place of the creamy white which the older sort has. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

BOSTON MARROW.—A splendid winter squash, of good keeping qualities. Flesh bright orange, fine grain, and flavor unsurpassed. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

HUBBARD.—A desirable sort, suitable for winter use. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

Benning's Bush Squash.

SPINACH—Spinat

One ounce for 100 feet of drill. Sow ten to twelve pounds to the acre.

NEW ZEALAND.—Grows large and produces a large quantity of leaves during the summer. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

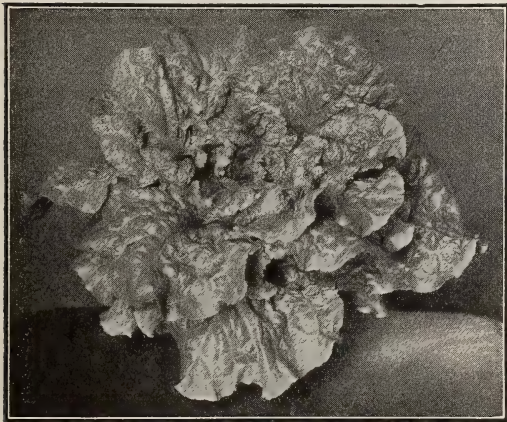
VICTORIA.—Dark green, crimped leaves. Packet 5c. Ounce, 15c. $\frac{1}{4}$ pound, 25c. Pound, 75c.

NEW LONG SEASON.—The best for spring sowing, because it will stand longer before running to seed than any other variety. Ounce, 15c. $\frac{1}{4}$ pound, 20c. Pound, 60c.

BLOOMSDALE SAVOY.—Well known and popular with market gardeners. The best and most profitable. Very curly. Ounce, 10c. $\frac{1}{4}$ pound, 15c. Pound, 35c.

NEW SPRING.—A valuable sort; its attractive dark green color, long-standing and hardy character make it desirable for both spring and late sowing. Ounce, 15c. $\frac{1}{4}$ pound, 20c. Pound, 60c.

Prices Subject to Change Without Notice



True Bloomsdale Curly Savoy Spinach.

TOMATO—Liebesapfel

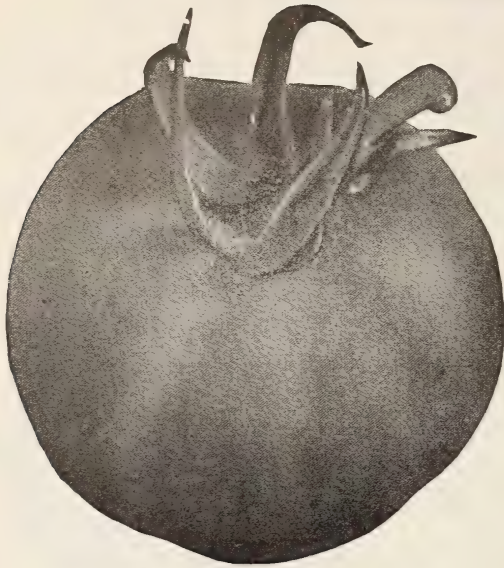
One ounce will produce about 1,200 plants; quarter pound to transplant for an acre.

For very early fruit the seed should be sown in a hotbed about the first week in March in drills 5 inches apart and $\frac{1}{2}$ inch deep. Later sowings may be made until the last of April. Sufficient plants for a small garden may be started by sowing a few seeds in a shallow box or flower pot and placing in a window in the house. When the plants are 3 or

4 inches high they should be set out 4 or 5 inches apart in another hotbed or cold frame, or removed into small pots, allowing a single plant to a pot.

DWARF CHAMPION.—An early purple-fruited variety, forming strong, erect, bushy plants. Fruit medium size, smooth and fairly solid. Grown extensively for plants and makes a handsome, sturdy bush. Packet, 10c. Ounce, 35c. $\frac{1}{4}$ pound, \$1.15. Pound, \$4.00.

TOMATO—Continued



New Stone Tomato.

DWARF STONE.—Vine dwarf, but vigorous and productive. While maturing with the later sorts, the bright red fruit is of good color, exceedingly smooth, very solid and the largest of any of the dwarf varieties. Packet, 10c. Ounce, 35c. $\frac{1}{4}$ pound, \$1.00. Pound, \$3.50.

"BONNY BEST" EARLY TOMATO.—Enormously prolific, scarlet red, globeshaped fruits, smooth and ripening evenly without cracking. This new variety is fully 10 days earlier than Chalk's Early Jewel, and within 2 or 3 days as early as Earliana. It is a vigorous grower, enormously prolific, with larger foliage than the Earliana, which will protect the fruit from the hot sun on days when early varieties with less foliage would scald. In color it is a beautiful scarlet red. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.00.

CHALK'S EARLY JEWEL.—An extremely early variety of brightest scarlet color, deep fruited, very hardy and solid, with few seeds and of excellent flavor. The popular early variety. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.00.

EARLIANA.—The earliest large tomato; is not only remarkable in earliness, but for its very large, uniform size, handsome shape, red color and wonderful productiveness. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.00.

JOHN BAER EXTRA EARLY.—Scarlet fruited, hardy and productive. Shippers should try it. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 75c. Pound, \$2.50.

RED ROCK.—One of the finest for canning, being extraordinarily solid, smooth and red. No other variety has any better qualities than the Red Rock. Of fine flavor, very meaty and wonderfully free from acid. A heavy producer and good shipper. We think it is the coming tomato for main crop and canners' use. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 50c. Pound, \$1.75.

GREATER BALTIMORE.—An excellent main-crop sort, producing large, solid, smooth fruit of a brilliant red color. It ripens evenly to the stem and is entirely free from ridges. Used extensively by canners. Packet, 5c. Ounce, 30c. $\frac{1}{4}$ pound, \$1.00. Pound, \$3.50.

ACME.—One of the earliest and best purple sorts, of medium size, perfectly smooth, very solid and a great bearer; crimson color with pinkish cast. Packet, 5c. Ounce, 25c. $\frac{1}{4}$ pound, 75c. Pound, \$2.50.

NEW STONE.—This variety has obtained great favor with canners and market gardeners everywhere. Its solidity and carrying qualities are remarkable. Its color is a desirable red; in shape perfectly smooth and thicker from stem to blossom end than most varieties. Packet, 5c. Ounce, 25c. $\frac{1}{4}$ pound, 75c. Pound, \$2.50.

PONDEROSA.—It is the largest-fruited deep-colored tomato known; of very fine quality, solid, almost seedless and free from acid. The vines are strong, rather open growth; fruits largely oblong in form and deep through. Packet, 10c. Ounce, 45c. $\frac{1}{4}$ pound, \$1.35. Pound, \$5.00.

MATCHLESS.—One of the best main-crop tomatoes. The solidity, absence of core, size and color of the fruit, together with its freedom from rot, all unite in making this well worthy of the name of "Matchless." Fine both for private and market gardening and canning. Packet, 5c. Ounce, 20c. $\frac{1}{4}$ pound, 60c. Pound, \$2.00.

PEAR-SHAPED YELLOW TOMATO.—Handsome, bright, pear-shaped yellow fruit. Packet, 10c. Ounce, 30c. $\frac{1}{4}$ pound, \$1.00.

PLUM-SHAPED YELLOW TOMATO.—Round and regular, bright yellow; used for pickling. Packet, 10c. Ounce, 30c. $\frac{1}{4}$ pound, \$1.00.

TOMATO PLANTS

Ready After April 15th

Best Varieties in Any Quantities



Livingston's Beauty Tomato

LIVINGSTON'S BEAUTY TOMATO.—The finest large-fruited, early purple variety. A decided favorite for home market or shipping, being early, hardy, a strong grower, productive, large, always smooth, perfect shape and excellent in quality. Color a very glossy crimson, with a tinge of purple. Grows in clusters of 4 to 6 large fruits, retaining its large size late in the season. Ripens early and is entirely free from ribbed and elongated fruit. Flesh very firm, has a tough skin and but few seeds. Seldom rots or cracks after a rain. Packet, 5c. Ounce, 25c. $\frac{1}{4}$ pound, 75c. Pound, \$2.50.

TURNIP—Stukrube

For early crop sow in latter part of April; for fall and main crop from middle of June until last of August. One pound is sufficient to sow an acre.

AMBER GLOBE.—A good variety for general crop. Flesh solid and sweet; keeps well late in spring, grows large; fine for table or stock. Ounce, 15c. Pound, 75c.

SEVEN TOP.—A variety much grown in the South for the tops, which are used as greens. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 20c. Pound, 50c.

ORANGE JELLY, or GOLDEN BALL.—Undoubtedly among the most delicate and sweetest yellow-fleshed turnips yet introduced. Not of large size, but firm, hard and of most excellent flavor. Packet, 5c. $\frac{1}{4}$ pound, 25c. Pound, 75c.

PURPLE-TOP STRAP LEAF.—A white, flat, strap-leaf turnip, with purple top; mild flavor and very popular for early use and general crop. Ounce, 15c. Pound, 75c.

IMPROVED AMERICAN PURPLE-TOP RUTABAGA.—Very hardy and productive; flesh yellow, solid and sweet; good for table use or stock. Ounce, 15c. Pound, 75c.



Purple Top Globe.



Rutabaga or Swede

PURPLE-TOP WHITE GLOBE.—A standard white variety, with purple top, handsome globe-shaped and heavy cropper; leading turnip among truckers and gardeners. Ounce, 15c. $\frac{1}{4}$ pound, 25c. Pound, 75c.

EXTRA-EARLY PURPLE-TOP MILAN.—Earliest turnip in cultivation, fit for use a week sooner than others. Suitable for spring or fall planting. Bulb forms very rapidly, making but few and small leaves. The turnips are flat, smooth, white with purple top. Packet, 10c. $\frac{1}{4}$ pound, 45c. Pound, \$1.50.

YELLOW ABERDEEN.—Hardy, good keeping turnip; yellow flesh and very productive. Ounce, 15c. Pound, 75c.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

Mulford Cultures

FOR LEGUMES

—To Inoculate Your—
**ALFALFA, CLOVERS, COW
PEAS, SOY BEANS,
VETCHES and ALL OTHER
LEGUME CROPS**

MULFORD CULTURES contain pure, tested strains of active, vigorous nitrogen-fixing bacteria for inoculating seeds of legumes or soil.

MULFORD CULTURES are "different" and should not be confused with other brands.

The **color** is different (they are dark, almost black, due to a special ingredient added to increase the growth and activity of the bacteria).
The **count** is different (bacterial counts show fully twice as many bacteria as in the old-form cultures).

The **bottle** is different (being sealed—an important feature which prevents all possibility of contamination from the outside air).

Increase Your Crops—Improve Your Soil

PRICES: Mulford Cultures are supplied for the varieties of legumes listed at the following prices:

Five-Acre Size.....\$5.00 ("A Dollar Per Acre")

One-Acre Size.....\$1.50

Garden Size ($\frac{1}{4}$ Acre).....50c

(These prices include delivery.)

Special prices on lots of twenty-five acres or more on one order, either of one kind or assorted, 80 cents per acre.

Special illustrated circular, giving full and interesting information in regard to the **MULFORD CULTURES**, mailed on request. Don't hesitate to write for this if interested.



SELECT FLOWER SEEDS

In the following pages is offered a **carefully chosen** list of **Flower Seeds**, in which no want of the flower garden has been neglected, the numerous varieties insuring a wide range of color, form, height, habit and season, thus permitting selection for any and every ornamental purpose.

All Flower Seeds mailed free on receipt of price quoted. Cultural directions on each packet.



Asters

ASTERS.—Of all garden flowers from seed, there is none that gives more satisfaction than the Aster. There is an early, medium and late sort now of rare beauty, so that you can have flowers from June until frost. Our sorts are the best. Packet, 5c.

ALYSSUM, SWEET.—Of dwarf, compact habit, 4 to 6 inches in height. It begins to bloom when quite small, and the plants are a solid mass of white from spring to late in autumn. Packet, 5c.

AMARANTHUS (JOSEPH'S COAT).—Tricolor; a hardy annual with leaves of red and green; well known as 'Joseph's Coat,' the colors being especially brilliant if grown in rather poor soil. Packet, 10c.

BALLOON VINE.—Remarkable for its inflated membranous capsules containing the seed. It is sometimes called "Love-in-a-Puff." A rapid and graceful climber. Flowers white. Tender annual; 6 feet high. Packet, 5c.

BALSAM (LADY'S SLIPPER, or TOUCH-ME-NOT).—Our Camellia-flowered strain produces the finest double blossoms, and is quite a revelation compared with the old varieties. Sow in rich soil for the finest blooms. Packet, 5c.

CALLIOPSIS, or COREOPSIS.—Very showy border plants, producing in great profusion and for a long time flowers which are bright yellow and rich brown, either self-colored or with these colors and red contrasted. Packet, 5c.

CANARY BIRD FLOWER.—A beautiful climber with curiously-shaped little canary-colored blossoms. Will blossom freely from July until killed by frost. Tender annual. Packet, 5c.

CANDYTUFT.—Showy, branching plants, 6 to 18 inches high. Indispensable for cutting and very effective in beds or masses. If sown in spring will blossom from July to September, or in the fall will blossom from May to July. Hardy annual. Fine mixed. Packet, 5c.

MARGUERITE CARNATION.—The plants of this wonderfully fine strain may be made to flower in 4 months. The flowers are large, double and very fragrant, and appear in very attractive shades of color. One of the best "pinks" in cultivation. Packet, 10c.

CENTAUREA (BACHELOR'S BUTTONS).—Popular Everlastings, bearing hundreds of clover-like heads of different colors. Useful also for bedding and borders. Packet, 5c.

CASTOR BEAN, or RICINUS.—Tall, majestic plants for lawns, with leaves of glossy green, brown or bronzed metallic hue and long spikes of scarlet, or of green, prickly fruit. Of very quick growth in rich soil. Tender annual; 6 to 15 feet high. Packet, 5c.

COSMOS.—Of all fall flowers there is none that has become so popular as Cosmos. Sow the seed in March, April and May, and will bloom in September. Does best in light, rich soil, in sunny places; grows

about 7 feet high. Flowers are borne in long stems in clusters of pink, dark pink and white colors. Fine for house and church decorations. Packet, 5c.

CONVOLVULUS MINOR (DWARF MORNING GLORY).—Dwarf plants of trailing, branching habit, each covering a space about 2 feet in diameter. At midday they are completely covered with a mass of pure white and brilliant many-colored blossoms, which remain open in clear weather till evening. Half-hardy annual; 1 foot high. Mixed. Packet, 5c.

CYPRESS VINE.—A most beautiful climber with delicate dark green feathery foliage and an abundance of bright star-shaped rose, scarlet or white blossoms, which contrast most effectively with the graceful foliage. Tender annual; about 15 feet high. Mixed. Packet, 5c.

FOUR O'CLOCK (MARVEL OF PERU).—The plants are large, and each needs 3 or 4 feet of space each way for its best development. The flowers are funnel-shaped, white, red, yellow or striped with these colors and open about 4 o'clock in the afternoon. Packet, 5c.

FORGET-ME-NOT (MYOSOTIS).—A favorite old-fashioned flower, bearing in profusion clusters of blue blossoms. It thrives well in the shade or open border. Hardy perennial. Packet, 5c.

ESCHSCHOLTZIA (CALIFORNIA POPPY).—The State flower of California. A genus of the Poppy family, fully as valuable as the common poppy for garden ornamentation, as it blooms almost continually throughout the season. A bed of these in full bloom is most handsome and beautiful in color. Hardy annuals; height 1 foot. Mixed. Packet, 5c.

FOXGLOVE (DIGITALIS).—Grows to the height of 3 or 4 feet, affording dense spikes of brilliantly-colored flowers, which are terminal and half as long as the height of plant. Colors white, lavender and rose. A valuable flower in every perennial garden; does not usually blossom until the second year. Hardy biennials or perennials. Packet, 5c.

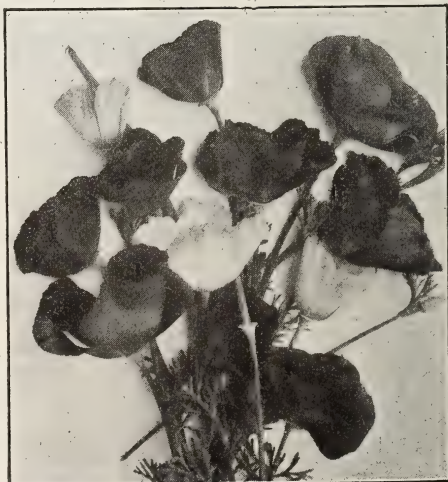
GOURD (CUCURBITA).—A tribe of climbers with curiously shaped and colored fruit. Being of rapid growth, they are fine to cover old fences, trellises, stumps, etc. Tender annual; 10 or 20 feet high.

DISH CLOTH.—A rapid climber, having long green fruit, the inside fibrous mass of which, when the shell seeds are removed, makes an excellent bath sponge. Packet, 5c.

ORANGE.—The well-known Mock Orange. Pkt. 5c.

PEAR-SHAPED.—Striped yellow, green and cream. Packet, 5c.

HELIOTROPE.—Highly valued for the fragrance of their flowers and duration of bloom. Half-hardy perennial, blooming the first year from seed. Dark varieties. Mixed. Packet, 10c.



Escholtzia

FLOWER SEEDS—Continued



Mignonette

HOLLYHOCK.—The most majestic of hardy plants of the garden. When planted in rows in the garden or among shrubbery the effect is beautiful. Pkt., 5c.

LARKSPUR (DELPHINIUM).—An old-fashioned, very choice, especially hardy annual, which increases in beauty each year. Vast improvements have been made by careful selection and attentive culture in size and color of the blossoms. Packet, 5c.

LOBELIA.—The dwarf and trailing varieties are fine for bedding, borders or hanging baskets; blooms profusely from June until November. Packet, 5c.

MARIGOLD.—One more of the old-time favorite; an annual of easy culture, extremely effective, suited well for bedding in masses. Packet, 5c.

MIGNONETTE.—Few ladies would think that a garden was complete without Mignonette. For fragrance and beauty there are few flowers that are as universally admired. Packet, 5c.

MOON FLOWER (IPOMEA GRANDIFLORA).—At night and dark days the plants are covered with an abundance of large, pure white, fragrant flowers, 5 to 6 inches in diameter. It grows very rapidly, and will cover a very large surface. Packet, 10c.

MORNING GLORY.—Climbers of rapid growth, bearing flowers of all possible shades. So well known it needs no description. Packet, 5c.

MORNING GLORY (IMPERIAL JAPANESE).—They are unquestionably the handsomest climbing vine in existence. Easily cultivated; can be sown in open ground in a sunny situation as soon as the weather is warm. The flowers are very large and most beautiful. Packet, 5c.

NASTURTIUM.—For easy culture and general satisfaction there is nothing that excels the Nasturtium.

Brilliant in color and of great variety. A bed of these fine blossoms adds tone and elegance to any flower garden.

NASTURTIUM, TALL SORTS.—Mixed. Packet, 5c. Ounce, 10c. $\frac{1}{4}$ pound, 35c.

NASTURTIUM, DWARF SORTS.—Mixed. Packet, 5c. Ounce, 10c. $\frac{1}{4}$ pound, 35c.

PANSIES.—Our selection of this well-known flower is, we believe, the best that is offered anywhere for size, variety and beauty, and have no equal. To grow pansies and secure the largest and best flowers, the seed should be sown in January and February, in the greenhouse or in boxes in the house. Packet, 10c.

PHLOX DRUMMONDI.—Very hardy annuals, unequalled in the magnificent display of their many and brilliantly colored flowers. They will grow even in poor soil, but in order to develop to their highest perfection must have rich soil and must be given room. Choice mixed. Packet, 5c.

PINKS (DIANTHUS).—Double Japan Mixed (*Chinensis Laciniatus*).—The flowers are rich in hue; very double, deep-fringed petals. Colors vary from white to rose, lilac, carmine, crimson, scarlet, purple, brown and almost black, spotted and striped. Mixed. Packet, 5c.

PETUNIA.—Petunias are unsurpassed for massing in beds. Their richness of color, duration of bloom and easy culture will always render them popular. The modern improved varieties are in this mixture. Packet, 5c.

POPPY (PAPAVER).—Well-known hardy annuals and perennials, flowering in great profusion throughout the summer. Sow early in the spring where the flowers are to bloom, and cover lightly. Packet, 10c.

SUNFLOWER (LARGE RUSSIAN).—For planting and bird food. Price, 20c per pound.

PORTULACA.—There are few flowers in cultivation that make such a dazzling display of color in the bright sunshine as a bed of portulacas. They are in bloom from about the first of July till killed by frost in autumn. Fine mixed. Packet, 5c.

SALVIA SPLENDENS (SCARLET SAGE).—Large, brilliant scarlet flowers are in these plants afforded a rich dark green background of dense foliage. This variety is most generally used in parks and on extensive lawns. Packet, 10c.

SWEET WILLIAM.—A very beautiful class of easily grown and very hardy plants of extreme richness and diversity of colors, deliciously sweet-scented. Nothing surpasses this old rugged favorite for clumps or borders. Hardy perennials; about 1 foot. Packet, 5c.

VERBENA.—Flower produces a mass of flowers from spring to late fall. Our strain is as fine as the world produces. Large flowers and free blooming. Packet, 5c.

WALLFLOWER.—Well-known, very fragrant garden plant, blooming early in the spring, with large, conspicuous spikes of beautiful flowers; prized for bouquets. Packet, 5c.

ZINNIAS.—One of the most brilliant annuals; a general favorite, its splendid double flowers rivaling in beauty, size and form moderate-sized dahlias. Choice mixed. Packet, 5c.

SWEET PEAS

ECKFORD MIXED.—All colors. Packet, 5c. Ounce, 15c. $\frac{1}{4}$ pound, 35c. Pound, \$1.00.

Bulbs are not sent postpaid.

SPENCER'S SWEET PEAS.—Ounce, 25c. $\frac{1}{4}$ pound, 85c. Pound, \$3.00.

SUMMER FLOWERING BULBS

CALADIUM ESCULENTIUM (ELEPHANT'S EAR).—One of the handsomest of the ornamental-leaved plants. Roots obtained in the spring will make good plants in the summer, and in the fall they should be taken up and stored in the cellar. Leaves 3 feet or more in length, nearly as broad. There is nothing so good as this Caladium for a grand bed for foliage in the garden. Large-sized bulbs. Price on application.

CANNAS.—The Canna is one of the most beautiful of all bedding plants. No other plant is better adapted to our climate, and nothing costing so little excels them for masses and beautiful foliage as well as the abundance of dazzling bloom in many shades. Plant outdoors about the middle of May, if the weather is warm and settled. When planting out the bulbs, do not water too freely until well started; then they should have an abundance. Set the bulbs 1 to 2 feet apart, according to circumstances. Price on application.

DAHLIAS.—The Dahlia is one of the showiest of

all autumn flowers. Commencing to flower in July, they are a perfect blaze of bloom until stopped by frost. Especially fine for cut flowers. We know of nothing more showy for table decoration than a loosely-arranged bouquet of long-stemmed dahlias. Price on application.

GLADIOLUS.—One of the most attractive of summer flowering bulbs. Excellent for mixed beds, and produce gorgeous effects if massed in large clumps. For a succession of bloom throughout the summer plant at intervals from April until June. Extra-sized bulbs.

MADEIRA VINE ROOTS.—One account of its very rapid growth and thick shade, this is one of the most popular climbers. Will run 20 feet or more in a season.

TUBEROSE.—The Tuberose is a beautiful pure white, waxlike, very sweet-scented, double flower, growing on tall stems, each stem bearing a dozen or more flowers. Our Tuberoses are all first-sized and splendid bulbs. Price on application.

GRASS AND CLOVER SEEDS

All Prices on Application



Timothy.

TIMOTHY (*Phleum Pratense*).—This makes one of the most popular, nutritious and salable of hay grasses. It is best adapted for sowing on clay or heavy loam, lowlands or in mountainous districts, although it will do well on any good loamy soils, provided moisture is abundant. It does not succeed so well, however, as Orchard, Tall Meadow or Herd's Grass on soil of a sandy or loamy texture, and is not of so much value for pasturage as other grasses. Red Top or Herd's Grass and Meadow Fescue mature at the same time as Timothy, and are excellent grasses to sow with it, both for hay and pasturage. They will increase the yield of hay and will very largely increase the yield and value of the pasturage. These will furnish an excellent mixture, both for hay and pasturage, on good loamy clay or low-ground soils.

ORCHARD GRASS (*Dactylis Glomerata*).—Orchard Grass is a very vigorous grower, and yields large crops of excellent and most nutritious hay, and will last for years in increasing value with proper treatment. It is succulent and nutritious, and when mowed requires only a few days of seasonable weather to start it growing again, and usually two good crops of hay can be cut in a season. Orchard Grass fields can be kept in a continuous state of productiveness, provided a light seeding is made early each spring. It can be sown either in the spring or fall, although it is best sown in the spring. Sow at the rate of two bushels per acre, or if sown with Red Clover, one and a half bushels of Orchard Grass and eight pounds of Clover are the quantities usually sown.

TALL MEADOW OAT GRASS.—This grass is increasing in popularity wherever it is grown. It seems to make more leafage and grazing and a larger yield of hay, and to keep green longer, both during the winter and summer, than other grasses. It is especially desirable and adaptable to the South. It withstands the heat and drought of midsummer and cold of winter, starts very early in the spring and continues to give good grazing until late in the fall. For

hay it can be cut twice in a season. Its nutritive qualities are first class.

KENTUCKY BLUE GRASS.—Kentucky Blue Grass is one of the richest and most nutritious of pasture grasses, and should be largely used in all pastureage mixtures, except on very light or sandy soils. For fall, winter and spring it makes the very best of pastureage, and mixed with other grasses, like Herd's Grass, or Red Top, and Meadow Fescue, or Randall Grass, will give an excellent all-the-year-round pastureage.

GOLDEN, or LIBERTY MILLET.—Golden, or Liberty Millet makes a large yielding and most nutritious hay crop, quick-growing and easily cured. It requires, however, to be seeded thickly—not less than one bushel per acre—and the crop should always be cut while in bloom, before the seed hardens in the head. If the seed is allowed to form, the stalks get hard, and it does not make nearly as good quality hay, and at the same time it is more exhaustive to the land.

RHODE ISLAND BENT (*Agrostis Canina*).—A fine and very permanent grass, chiefly used for pastures or lawns, for which it is one of the best. Bushel equals fourteen pounds.

RED TOP, or HERD'S GRASS.—Red Top, or Herd's Grass, is one of the best and most satisfactory grasses all throughout the South. It is well adapted to all soils and situations, succeeding well on light, sandy soils, as well as stiff upland and lowground, and it really succeeds better in moist situations than almost any other grass. After once being established, it thickens and improves year by year, taking possession of the land and increasing in yield and quantity each successive year.

BERMUDA GRASS.—One of the most valuable pastureage grasses for the South. Recommended for spring seeding only.



Golden, or Liberty Millet.

CLOVERS

All Prices on Application

RED CLOVER (*Trifolium Pratense*).—Red Clover not only furnishes most excellent pasturage and fine hay crops, but its growth improves the land and adds humus to the soil wherever it is grown. It is the standard hay, pasturage and soil-improving crop wherever general farming is practiced.

ALSIKE CLOVER.—Grows thicker and is finer in growth than Red Clover, making better hay and probably more and better grazing. It is also hardier, resisting extremes of heat and drought, and also severely cold weather to a remarkable extent. It succeeds on a variety of soils, light upland loamy lands as well as stiff bottom lands. The good qualities of Alsike are being appreciated everywhere.

CRIMSON, or SCARLET CLOVER.—Also known as Annual, or German Clover. This is for fall sowing only. When sown during June, July, August and September, in this latitude, it produces a wonderful crop and is one of the most successful soil-improvers that we have. Improves worn-out and poor soils, and is the cheapest and best fertilizer. Being a winter crop, it should be sown in August and September. Sow ten to fifteen pounds per acre. Bushel, sixty pounds.



Red Clover.

PACEY PERENNIAL RYE GRASS.—Used very largely in Europe for both hay and pasture, and well adapted to this section also for both. It is a strong grower, starting early in the spring, and can be used to great advantage in mixtures. When sown alone use two to three bushels per acre or eight to ten pounds in mixture.

JAPAN CLOVER (*Lespedeza Striata*).—This is particularly suitable for waste lands, woodland pastures, grows fairly well on poor soils and spreads rapidly, and when once established usurps wild growths, and will in many cases even subdue broom sedge. It is not, however, a pest, and can be gotten rid of by plowing it up, and is excellent fertilizer. Japan Clover is particularly valuable for pasture on such soils as described, and where the soil is good yields a fair quantity of good hay. It is relished by cattle, is nutritious and fattening. To obtain a stand it is only necessary to scatter the seed broadcast in the spring, during March or April, at the rate of about ten pounds per acre. Harrowing the land over before the seed is sown, when it can be done, is, of course, better, though this is not imperative to obtain a good stand.

ALFALFA, or LUCERNE.—The hardiest and most lasting of all Clovers, and when once established the most productive as well as the best soil-enricher of all. It can be cut for hay several times a year, yielding bountifully at each cutting, and the hay is of the highest feeding value. When established, Alfalfa yields four to eight cuttings per season, depending upon the section. It should not be grazed. It does

best on a loamy limestone soil, the lime being very essential to its growth, and where lime is absent from the soil it should be added, and, as the roots penetrate to a great depth, it is not advisable to sow it on very heavy clay soils.

WHITE BOKHARA, or SWEET CLOVER.—Can be sown either in the spring or fall. Should be sown at the rate of 15 pounds to the acre. It furnishes good inoculation as a crop to precede alfalfa, and is also adapted for sowing on hillsides that are liable to wash or gully; but it will not succeed well on lands that do not contain some lime content. It is also largely used for sowing for bees.



Field of Alfalfa.

PRICES ON ALL
GRASS AND CLOVER SEED
ON APPLICATION



Hairy, or Winter Vetch.

working of corn or cotton with oats or wheat. Should be sown at the rate of twenty to thirty pounds to the acre with one bushel of Oats or three-fourths bushel of Wheat. The Oats or Wheat help to hold the Vetch off the ground, enabling it to make a better growth.

WHITE SPRING OATS

For a spring oat for seeding in March and April, the White Spring Oats are unquestionably the best and surest yielding of spring oats, the advantages claimed for it being that it is earlier to mature, free from rust, healthy, clean and vigorous growth of straw and makes a remarkable good yield of clean, bright, heavy grain. On account of its earliness to mature, it is one of the surest cropping varieties for the South.

WINTER BARLEY

The particular value of Barley in the South is for fall, winter and spring grazing, and to cut as it is heading out to use as a hay crop. In sections where it is difficult to grow the regular grasses for hay, the use of grain crops, such as Barley, Rye, Wheat and Oats, is very desirable. All of these crops make most nutritious feed, and cure in first-class shape to take the place of hay.

DWARF ESSEX RAPE

This crop is very highly recommended for pasturage for sheep and cattle, furnishing most rich and nutritious pasturage within six to eight weeks from the time of sowing. The fattening properties of Rape are said to be very much better than those of clover. Sow three to five pounds per acre in drills; six to eight pounds per acre broadcast.

BUCKWHEAT

A valuable crop for soil improving, production of grain and largely used for sowing for bees. The yield of grain is 15 to 25 bushels per acre, and can be used for grinding for buckwheat flour, or the whole grain is splendid for poultry and hog feed, being very fattening. It is best not to sow before June, though July and August are better months in this latitude.

NEW JAPANESE.—This new sort has proven to be much earlier and more productive than any other variety. Grains very large and rich brown color. It excels all in yield and earliness.

EARLY AMBER SORGHUM

Furnishes a large yield of most nutritious forage, which can be fed either green or cured, and will yield two or three cuttings a year, stooling out thicker each time it is cut. It grows 10 to 12 feet high. Sow broadcast for forage at the rate of 1 to 1½ bushels per acre in drills 3½ to 4 feet apart.

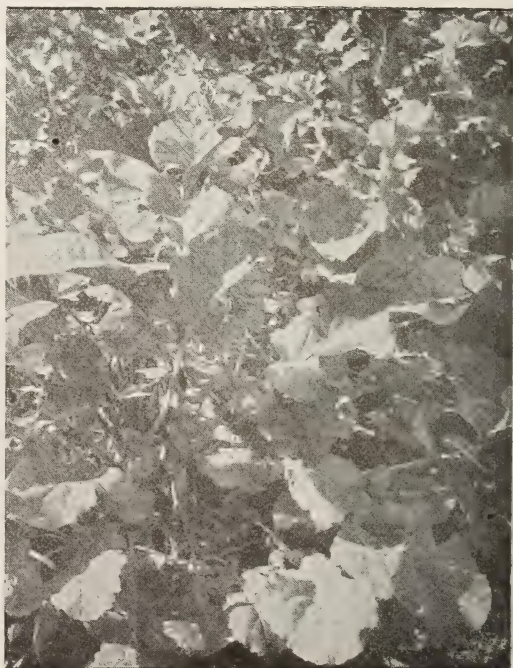
COW PEAS

Cow Peas will make a good growth under very unfavorable conditions and on poor soil. However, as their merit as a soil improver lies in their ability to gather nitrogen, it stands to reason that the greatest benefit will be derived where the soil is put in good condition and fertile. Applications of lime to the soil are very beneficial also. The seed may be sown at any time in the spring when it has become warm enough to plant corn, and from that on to within about two months of frost time. It is well to remember the plant develops best in warm weather. Seed may be sown broadcast or with a wheat drill, using one to one and one-half bushels per acre.

BEST VARIETIES TO PLANT.—Clays, Whip-poor-wills, New Era, Mixed, Soja Beans, Black Cows, Black Eyes, Canada Field Peas, etc. All our Cow Peas are fancy, re-cleaned, free from hulls. Write for our lowest prices.

HAIRY or WINTER VETCH

This is one of the most valuable forage crops for the South, but requires to be sown in the fall for best results. Can be sown any time from July to October. Succeeds admirably sown at the last



Dwarf Essex Rape.



WHEAT

LEAP'S PROLIFIC.—A splendid new variety, originating in the Shenandoah Valley. It is remarkable for its productiveness and fine quality of grain. The grain is flintier and of better milling qualities than the ordinary varieties. It is very uniform in its growth, stiff-strawed, healthy, strong grower and early to ripen. One thing particularly noticeable about this variety is its stooling qualities, it being particularly superior in this respect, producing more stalks to plant than the ordinary wheat. This, with the fine long heads which it produces, means an increase in productiveness, and farmers who have sown this variety are enthusiastic in its praise, claiming it to be the best and most productive variety now on the market.

PURPLE STRAW, or BLUE STEM.—A fine productive Wheat, in high flavor in the South. Makes very best quality flour. We are very careful in securing this seed which we offer to get them from the best and largest-yielding crops grown throughout this section, and we have received the most flattering reports from our customers as to the large and satisfactory yields obtained from our seed.

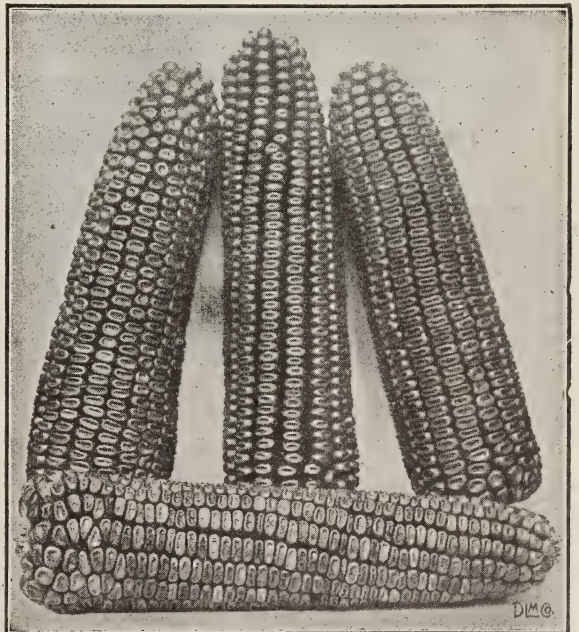
SELECTED SEED CORNS

BOONE COUNTY WHITE.—A large-eared variety of White Corn. It has deep, soft and very white grains; it is a vigorous grower and has become very popular, and has probably taken more premiums than any other variety of corn for the last few years.

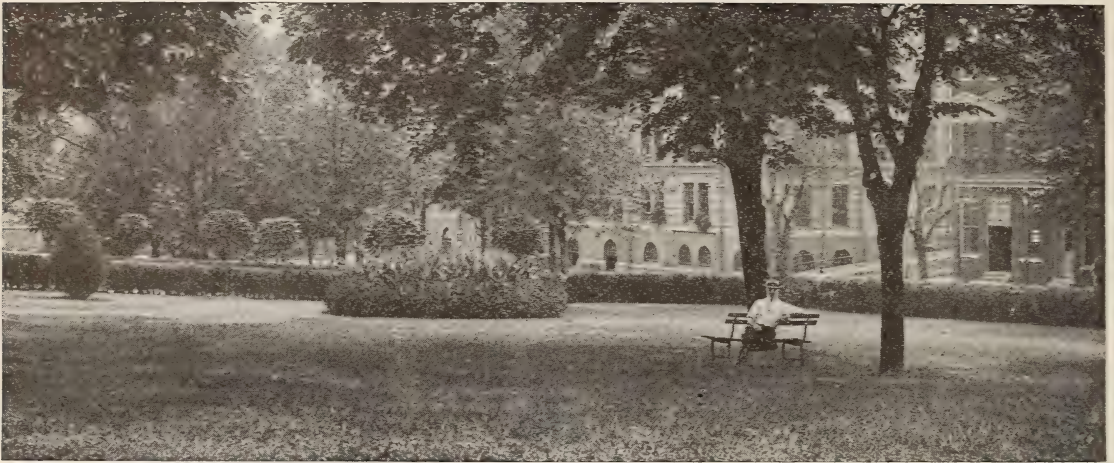
GOLDEN BEAUTY.—A broad-grained, large-eared variety, maturing in about 120 days; cob is small; grain very heavy and of a beautiful golden-yellow color.

COCKE'S PROLIFIC.—A very valuable white variety, making enormous yields on rich land. Especially adapted to river bottoms or lands subject to overflows. On account of its flintiness, it can be shocked and harvested early and will not rot in the shock; grains white and flinty; superior for meal and hominy.

EUREKA ENSILAGE.—This variety is bred from the Cocke's Prolific. The ears are much larger and longer, but not as many to the stalk. The ears run from 9 to 12 inches long. It is a rather hard, pure white variety, and makes excellent meal. Is especially adapted to rich low grounds, and is one of the most valuable ensilage varieties.



Golden Beauty



MANN'S EVERGREEN LAWN GRASS

Put Up by Us and Under Our Own Formula

FINE LAWNS can only be made by using the best grade of grasses. The proper blending to give satisfactory result needs the study of years. Among some of the most beautiful lawns of Washington and its suburbs are those sown with "Evergreen" Lawn Grass Seed.

These seeds should be covered very slightly and a roller run over the ground after sowing. Pint, 15c. Quart, 30c. Pound, 35c. 3 pounds, \$1.00. Bushel (of 14 pounds), \$4.00.

LAWN GRASS FOR SHADY PLACES AND UNDER TREES.—A selection of grasses that thrive well in shaded situations, under trees, or close to walls where there is little sun. Price: Quart, 30c. Pound, 35c. 3 pounds, \$1.00. Bushel (of 14 pounds), \$4.00

LAWN AND GARDEN FERTILIZER

Old and New Lawns Require Stimulating after the long drag through winter, or in the fall, after the season of cutting and the heat of summer. For this purpose our high-grade Bone Meal is best adapted to the wants of the lawn. It should be sown broadcast from the middle of February to the first of May for spring, and from September to November in the fall. In preparing a new lawn use a liberal quantity and rake it in thoroughly before sowing the seed. Ten pounds sow enough for 250 square feet. Ten pounds, 50c. 100 pounds, \$3.00. 200-pound Bag, \$5.50.

PULVERIZED SHEEP MANURE FOR LAWNS.—5 pounds, 30c. 10 pounds, 60c. 100-lb. bag, \$2.50.

MANN'S PERMANENT PASTURE MIXTURES

Mann's Special Grass and Clover Mixtures are put up from grasses adapted to this section, in such proportions as experience has shown are best suited to the different soils and purposes for which they are recommended. Those for permanent pasture are composed of grasses which succeed each other in growth and give a succession from the first of spring till late in the winter; while for those desired more for cutting for hay we have combined grasses which ripen together. The different mixtures are prepared both as to quantity and varieties best adapted to the soils and situations for which they are recommended. We shall take pleasure in giving our customers the benefit of our knowledge and experience in regard to mixtures to be sown, or we will be glad to advise them as to suitable grasses for their soils and purposes at any time that special information may be desired.

MIXTURE No. 1

For Light, Gravelly or Sandy Soils

Composed of the following Grasses and Clovers:

Italian Rye Grass	Sheep Fescue
Red Clover	Meadow Fescue
Alsike Clover	Orchard Grass
Tall Meadow Oat Grass	Red Top or Herd's Grass
Alfalfa	Kentucky Blue Grass
Clover	Arctic or Rescue Grass
Red Fescue	

Sow thirty to thirty-five pounds to the acre.

MIXTURE No. 2

For Heavy Loam or Clay Soils

Composed of the following Grasses and Clovers:

Alsike Clover	Red Clover
Orchard Grass	Tall Meadow Oat Grass
Red Top or Herd's Grass	Kentucky Blue Grass
White Clover	Perennial Rye Grass
Sheep Fescue	Timothy
Meadow Fescue	Meadow Foxtail

Sow thirty to thirty-five pounds to the acre.

HIGH-GRADE FERTILIZERS

The Yield and Quality of Vegetables Depend Upon Continuous and Rapid Growth

MANN'S PURE RAW BONE

Pure animal bone is one of the best and most satisfactory fertilizers that the farmer can use. It can always be relied upon to give excellent results upon the growing crops, at the same time acting as a permanent improver, showing its results for several years afterwards wherever it is applied. It is the best of dry-weather fertilizers, as, if it is prevented by draught from acting, its strength still remains in the soil, and is thus available when seasonable weather comes on or for later crops.

ANALYSIS

Bone Phosphate of Lime..... 45 to 55 per cent
Ammonia 2½ to 3½ per cent

Put up in 200-pound bags, 10 bags to the ton.

SPECIAL CORN AND OATS FERTILIZER

We recommend this specially prepared fertilizer for corn and oats. Its use will greatly increase the yield.

ANALYSIS

Ammonia 1¼ per cent
Available Phos. Acid..... 10 per cent

Put up in 167-pound bags, 12 bags to the ton.

STANDARD POTATO FERTILIZER

This fertilizer is especially prepared for Irish and sweet potatoes, but will give splendid results on all root crops. We cheerfully recommend this brand to any one wanting a high-grade POTATO FERTILIZER. We ask you to give it a trial.

ANALYSIS

Ammonia 2 per cent
Phos. Acid 8 per cent
Potash (Actual) 3 per cent

Put up in 167-pound bags, 12 bags to the ton.

WIZARD BRAND PULVERIZED SHEEP MANURE

This is purely a natural and most nutritious plant food, clean to handle, and its effect is immediate and lasting. There is nothing better to mix with soil for potting plants. Florists who use it extensively advise mixing about one-seventh manure and six-sevenths soil. As a top dressing for lawns, it is unequalled. Five pounds, 30c. Ten pounds, 60c. Twenty-five pounds, \$1.00. Hundred pounds, \$2.50. Special prices in ton lots.

AMMONIATED DISSOLVED BONE (FOR TOBACCO)

This fertilizer we can recommend for a high-grade fertilizer for tobacco.

ANALYSIS

Ammonia 2 per cent
Phos. Acid 8 per cent
Potash 2 per cent

Put up in 100-pound bags, 20 bags to the ton.

POTONAC "A" AMMONIATED SUPER-PHOSPHATE

This is our well-known brand of General-Crop Fertilizer, and has stood the test for more than twenty-five years. As a fertilizer, we cannot speak too highly for this brand for all early vegetables.

ANALYSIS

Ammonia 2 per cent
Available Phos. Acid 8 per cent
Potash K. O. 2 per cent

Put up in 167-pound bags, 12 bags to the ton.

MANN'S SPECIAL GRAIN AND GRASS MIXTURE

A grade of fertilizer which we can recommend for grain and grass.

ANALYSIS

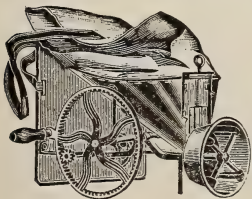
Ammonia 2 per cent
Available Phos. Acid..... 10 per cent

Put up in 167-pound bags, 12 bags to the ton.

FINE-GROUND FISH, GROUND TANKAGE, HIGH-GRADE ACID PHOSPHATE, MURIATE OF POTASH, NITRATE OF SODA, LAND PLASTER

—Prices on Application—

CAHOON BROADCAST SEED SOWER



For Sowing Seed, Grain,
Clover Seed, Etc.

The best seeder manufactured, and sows all kinds of grain, clover seed, etc., rapidly and evenly. A person entirely unused to seeding can, by following the simple directions sent with the machine, sow from four to six acres an hour at a common walking gait. Sows uniformly and saves four-fifths in labor by its use. Price, \$4.00 each.

CYCLONE SEED SOWER

A Very Popular Seeder and Very Extensively Sold.

This sower is guaranteed to distribute seed perfectly, evenly, and will not throw seed in an upward direction or against the operator, but direct and evenly to the land. Sows clover, timothy, red top or herds grass, alfalfa, oats, rye, wheat, millet, buckwheat, turnip and other varieties of farm seeds. It also distributes bone dust, land plaster and fertilizer to advantage. Clover seed is sown a width of 18 feet; timothy, 15 feet; alfalfa, 20 feet; wheat, 25 feet; millet, 18 feet; oats, 18 feet. Thus, it will be seen that one operator can sow from 40 to 60 acres per day, according to kind of seed. Price, \$2.00 each.

INSECTICIDES

HAMMOND SLUG SHOT

A non-poisonous powder; it requires no further mixing or preparation; easily applied; not injurious or dangerous to animals, the person applying it or fruits and vegetables treated; destroys potato bugs and beetles, green and black fly, slugs, worms, caterpillars, etc. Ten to forty pounds is sufficient for an acre.

1-Lb. Carton.....20c 5-Lb. Package.....50c

HAMMOND GRAPE DUST

For Mildew and Blight
5 Lbs., 65c.

LIME SULPHUR SOLUTION

This material combines the great fungicidal properties of Sulphur with the scale remedy, and is specially recommended for peach and plum trees, which need the combined treatment in the fall and spring. In spraying this material care should be exercised to avoid getting it in the eyes, and gloves should be worn to protect the hands. Prices:

1-Qt. Cans.....40c	10-Gal. Cans.....\$4.50
1/2-Gal. Cans.....65c	1/2-Bbl., per gal.....35c
1-Gal. Cans.....\$1.00	1 Bbl., per gal.....30c
5-Gal. Cans.....\$3.00	

Add 9 to 10 parts cold water to 1 part of LIME-SULPHUR SOLUTION and stir thoroughly. Apply with spray pump.

WHALE OIL SOAP

Makes an elegant wash for trees and plants where insects and eggs affect the bark, and for smearing on the trunks of trees to prevent worms from crawling up.

1 Pound, 30c 5 Pounds, \$1.25
10 Pounds, \$2.50

KEROSENE EMULSION (Liquid)

Ready for use by simply adding 12 to 15 parts water to 1 of mixture. This is strictly an insecticide for all sucking insects.

Quart, 50c Gallon, \$1.50

LEMON OIL

The cheapest, safest and most effectual insecticide extant for all purposes. Destroys all insects on the leaves and roots of plants without injury to flower or foliage, leaving no foreign odor.

1/2 Pt. 30c Qt. 90c
Pt. 50c Gal.\$2.50

PYROX (Bowker's)

The one best and safest all-round spray which kills all leaf-eating insects and prevents blights and all fungous troubles, without injury, on fruit trees, grapevines, currant bushes, potatoes, cantaloupes, cucumbers, and other garden vegetables; also rose bushes, shrubbery, etc.

1 lb.	\$.40
5 lbs.	1.75
10 lbs.	3.00
25 lbs.	6.25
50 lbs.	11.00
100 lbs.	20.00



FINELY GROUND TOBACCO DUST

One of the cheapest and most effective remedies for lice and worms on cabbages, striped bugs and other insects on melons, cucumbers and squashes.

1 Pound, 10c 5 Pounds, 35c

PARIS GREEN

Paris Green is slightly more soluble than arsenate of lead, and therefore acts more quickly in killing insects. It should never be used in lime-sulphur solution, but is fine to use in connection with Bordeaux Mixture. It is a very efficient poison for use on all plants the foliage of which is not very tender.

1/4 pound, 20c 1/2 pound, 35c
1 Pound, 60c

TREE TANGLEFOOT

A sticky substance applied directly to the bark. To protect trees against climbing insect pests. One application remains sticky, fully exposed to weather, three months. One pound will make a band 7 to 8 feet long. One pound, 45c.

BUG DEATH

A non-poisonous powder. It is sure death to all plant-eating pests.

1-Lb. Pkg.....25c 5-Lb. Pkg.....75c
3-Lb. Pkg.....50c 12 1/2-Lb. Pkg.....\$1.50

SCALECIDE

is not disagreeable to handle; does not corrode or stop up your pumps; does not injure the most delicate skin (it can even be placed in the eyes without the slightest inconvenience or injury) and does not stain woodwork. It is not a Summer spray, but the Winter application has an invigorating effect on plant or tree growth.

One gallon of "SCALECIDE" will spray as many trees as 3 1/2 gallons of Lime-Sulphur Solution. Dilute, in all dormant spray work, 1 part to 15 parts of water. Quart, 60c. Gallon, \$1.75. 5 gallons, \$6.50.



HELLEBORE (Powdered)

An excellent protection from currant worms, grape slugs, caterpillars, etc. May be applied dry or mixed in water. One ounce to three gallons. 1/2-Pound Box, 30c.

BORDEAUX MIXTURE

Ready for use by simply adding water. One pound, 40c, makes five gallons spray. 5 pounds, \$1.80, makes 25 gallons spray. Quart, 50c. Gallon, \$1.50.

"BLACK LEAF 40"

A Concentrated Solution of Nicotine Sulphate

For spraying against sucking insects, such as green and woolly aphis, pear psylla, grape leaf hopper, ear thrip, etc., use one part Black Leaf 40 to about 900 to 1,000 parts water.

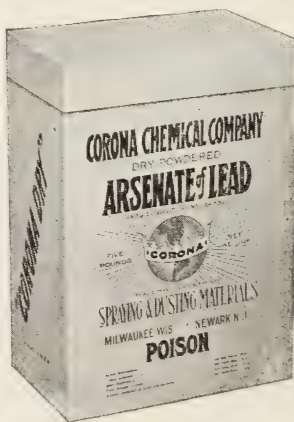
PRICES:

1-Oz. Bottle.....25c 1/2-Lb. Can.....\$1.00

CORONA DRY

Powdered Arsenate of Lead

CORONA DRY is a chemically pure Arsenate of Lead, which is put up in a patent powdered form containing one-third arsenic, the most effective known poison for leaf-eating insects. It mixes readily with water, or it may be used dry in its powdered form. It is distinctive for quick poisoning, even application and great adhesiveness. Its purity and unusual chemical activeness give it the highest poisoning power.



Paste Form.

1-Lb. Pkg., per lb., 30c

Powdered Form.

1-Lb. Pkg., per lb....50c 10-Lb. Pkg., per lb....40c
5-Lb. Pkg., per lb....45c 50-Lb. Pkg., per lb....35c
100-Lb. Pkg., per lb....30c

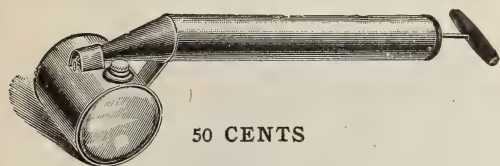
BORDEAUX MIXTURE AND PARIS GREEN (Powder)

A combination of Bordeaux Mixture and Paris Green. A very quick-acting poison for use on potatoes and tomatoes, as well as other crops. It not only kills the bugs, but at the same time defends against blight. It can either be used as a spray or for dusting.

1-Lb. Pkg., 55c 3-Lb. Pkg., \$1.50
35-Lb. Pkg., \$16.50

SPRAYERS FOR INSECTICIDES

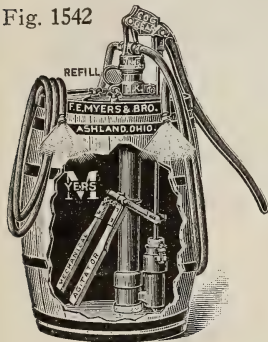
HARVEST HOME SPRAYERS



50 CENTS

These Sprayers throw a very fine spray of any liquids usually used for destroying insects, bugs, etc., and for keeping cattle free from flies during the summer weather.

Fig. 1542



THE MYERS COATING OR PAINTING MACHINE AND SPRAY PUMP

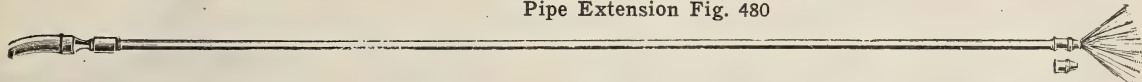
For Painting or Whitewashing Buildings, Etc., and Spraying Large Orchards. Brass Cylinders, Brass Valve Seats, Hemp-Packed Plunger and Wrought-Steel Handle

Fig. 1542, No. R 308B. Outfit same as above, with one lead of 15 feet of 7-ply ½-inch discharge hose and one Fembro Nozzle.

Price, \$32.00, Complete with Barrel.

MYERS' IMPERIAL BRASS SPRAY PUMPS

Pipe Extension Fig. 480



MYERS COG GEAR BUCKET SPRAY PUMP

Fig. 1726

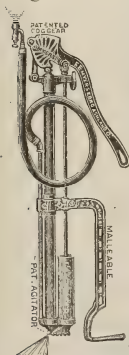


Fig. 1726, No. R 324, illustrates the Myers Spray Pump Changing-Gear Handle. This Pump has 1½-inch diameter brass cylinder with solid plunger, brass ball valve and brass air chamber discharge tube. The foot rest, head and cog-gear handle are malleable iron. The large cylinder, in combination with the cog-gear handle, makes this an exceptionally easy-working pump of more than ordinary capacity. Has patented jet agitator, which keeps liquid thoroughly mixed.

Price, with 3 ft. Rubber Hose.....\$7.50

Price, with 8 ft. Extension Pipes.. 8.25

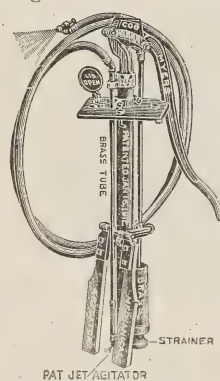
Bordeaux Nozzle 1.50

Vermorel Nozzle 1.25

Extension Pipe 85c

MYERS COG GEAR BARREL SPRAY PUMP

Fig. 1521 With Malleable Iron Base



CYLINDERS, VALVES, VALVE-SEATS AND DISCHARGE ALL BRASS.

All Working Parts Submerged in Liquid, Hence No Priming Necessary—Has Both Jet and Mechanical Agitator.

Fig. 1521, No. 318B, represents Myers Cog-Gear Barrel Spray Pump, with both jet and mechanical agitators, complete with 15 feet of ½-inch 5-ply discharge hose and Myers graduating Vermorel nozzle.

Price, \$17.50.

AUTO SPRAY No. 5

GENERAL-PURPOSE BUCKET SPRAY PUMP

This Pump is the ideal all-purpose hand sprayer. Its field is practically unlimited, as it may be used for spraying trees, vines, garden truck, potatoes and field crops. It also can be used for handling white-wash, disinfectants, etc.

It is made entirely of brass, doing away with all danger of corrosion. All the parts are made on screw machine, and for that reason are interchangeable.

The Pump is double-acting. This feature makes the spray continuous. Any one who has used a single-acting pump of this kind will immediately recognize the advantage in a pump that works on both the up and down stroke. We furnish with this pump 2½ feet ½-inch suction hose, with heavy strainer, on an extension. Price, \$4.00.

BROWN'S AUTO SPRAY No. 1**A SELF-OPERATING OR AUTOMATIC SPRAYER**

Weight empty, 7 pounds. Weight loaded, 39 pounds.
Weight shipping, 15 pounds.



Patented.

The Auto-Spray No. 1 is one of the best on the market. It is very strong and practical. When properly charged contains 3 gallons of solution and 1 gallon of compressed air. Ten to 12 strokes of the plunger will compress the air and 2 pumpings will empty the entire contents.

All parts which come in contact with solution are made of brass, and the handle and other parts are made of malleable iron.

Length of cylinder, 21 inches; diameter of cylinder, 7 inches; capacity, about 4 gallons; weight empty, 7 pounds.

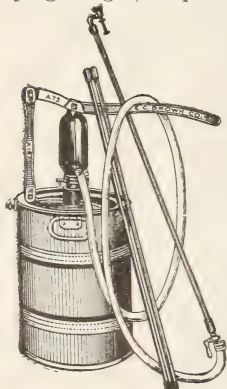
Auto-Spray No. 1C—Galvanized Reservoir, Stop Cock. Our special price.....	\$7.00
Auto-Spray No. 1D—Galvanized Reservoir, Auto-Pop. Our special price.....	7.50
Auto-Spray No. 1A—Brass Reservoir, Stop Cock. Our special price.....	10.50
Auto-Spray No. 1B—Brass Reservoir, Auto-Pop. Our special price.....	11.00
No. 6—Brown's Bucket Spray.....	5.50

EXTRAS

Auto-Pop Nozzles, with Hose and Fittings.....	\$2.00
Extension Pipe, Brass, 2-foot length.....	.60
Brass Elbow Extension.....	.30
Brass Strainer for straining solutions used in Auto Spray	1.40

AUTO SPRAY No. 40B**WHITEWASH AND PAINTING MACHINE.**

Capacity, 8 gallons; net weight, 30 pounds; shipping weight, 40 pounds.



The Auto-Spray is adapted for spraying whitewash, cold-water paint, trees, garden vegetables, plants, etc. It is powerful, simple, perfect mechanically and fully warranted.

The machine is always furnished complete with 8 feet of best 3-ply discharge hose, 8 feet of iron extension pipe, lever shut-off and Vermorel nozzle.

Auto-Spray No. 3 with Galvanized Tank and full equipment. Our special price \$20.00.

No. 40-D—Capacity, 12 gals. On Truck. Price, \$27.50.

"IRON AGE" No. 197**TWENTY-GALLON BARREL SPRAYER**

Complete as shown in cut, with two lengths of pipe 2 feet each, in addition to 33 inches of hose.

Price, \$20.00.

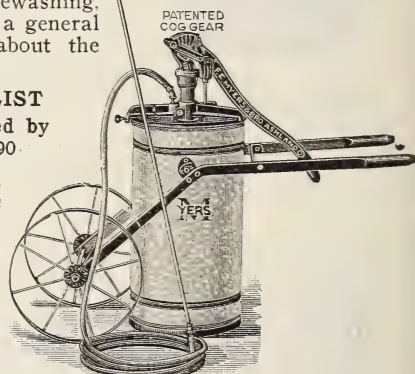
THE MYERS PORTABLE SPRAYER

Made of extra-heavy galvanized iron; capacity 12½ gallons; suitable for greenhouse work, spraying trees, whitewashing, painting, etc.—a general utility pump about the home.

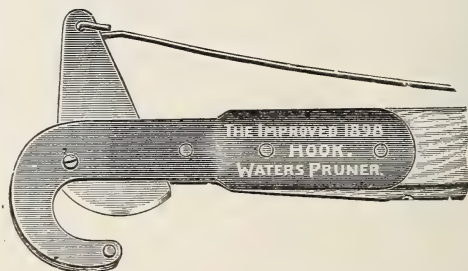
With Cog-Gear Spray Pump, Dasher and Jet Agitator.

PRICE LIST
Represented by
Fig. 1690

No. R 337B, Myers Portable Sprayer, complete as shown in illustration, with Dasher and Jet Agitator, 15 ft. Hose, 8 ft. Extension and Vermorel Nozzle.



Price, \$31.00.

WATERS' TREE PRUNER

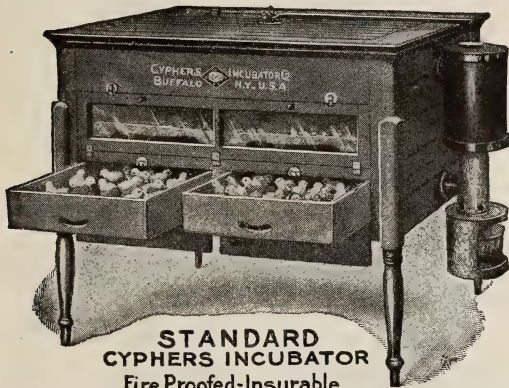
Waters' Tree Pruner is the only pruning implement which requires no skill in sharpening. It is least liable to get out of order.

4 feet long.....	\$1.00
6 feet long.....	1.25
8 feet long.....	1.50
10 feet long.....	1.75
12 feet long.....	2.00
Extra Knives	.30

CYPHER'S INCUBATORS

Fireproof—Insurable

The Standard Hatcher of the World—Guaranteed



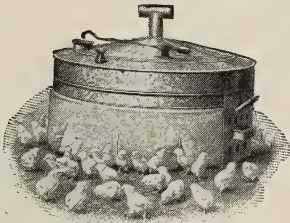
**STANDARD
CYPHERS INCUBATOR**
Fire Proofed-Insurable.

Prices on Application

Complete Equipment Furnished With Each Machine

CYPHER'S BROODERS

Prices on application.



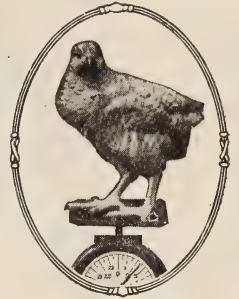
Ventilation is provided for positively and
scientifically.

PHILADELPHIA POULTRY MARKER

Well made, with steel spring and cutter, nickel-plated. Price, 30c.

CORN SHELLER

Price, \$4.00.



2¼ lbs. at 8 weeks!
Registered trade-mark

BLATCHFORD'S MILK MASH

Raises the Hatch

Fresh stock on hand in season.

**PILLING FRENCH POULTRY
KILLING KNIFE**

Every poultry raiser should have one of our Kill-
ing Knives. Price, 60c.

PRATTS' POULTRY REGULATOR

TRADE MARK REGISTERED

BEEF SCRAP.—100-lb. bag, \$5.50; 6c per lb.
OYSTER SHELLS.—100-lb. bag, \$1.25; 2c per lb.
CRYSTAL GRIT.—100-lb. bag, \$1.25.
CHARCOAL.—50-lb. bag, \$2.25.

CARBOLA
Saves Time and Labor
Gives Better Results

applied with either sprayer or brush. Price: Trial pkg., postpaid 35c, by express 25c; 10-lb. pkg. by express \$1.00; 20-lb. pkg. by express \$2.00; 50-lb. pkg. \$4.00.

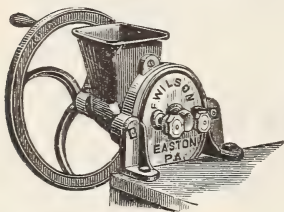
The DISINFECTANT that PAINTS

Carbola is infinitely superior to lime, which loses what slight disinfecting qualities it ever had by slacking when exposed to the air. Very much better than kalsomine or whitewash because it paints just as clean and bright a white, but will not chip, scale or peel off—no matter how many coats are applied. It may be used on either stone, brick, wood, metal or cement, and can be put on over a whitewashed or painted surface. It can be

MANN'S GREEN BONE CUTTERS

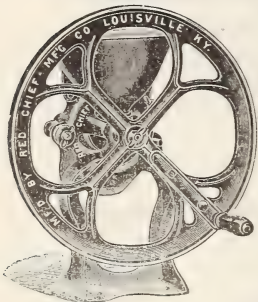
The feed is both automatic and self-governing and successfully adapts itself automatically to the operator's strength, and the self-governing feed never feeds faster than the operator can cut easily. The cutting device is the latest pattern and is guaranteed to do the work successfully and satisfactorily. Cuts all gristle and meat. Nothing escapes uncut.

No. 5C (with Crank Handle).....	\$ 9.50
No. 5B (with Balance Wheel).....	12.50
No. 5BM (with Balance Wheel and Iron Stand)	16.00
No. 7 (with Balance Wheel).....	18.50
No. 7½ (semi-Power Machine).....	25.00

WILSON'S BONE AND SHELL MILL

No. 1—Grinds oyster or clam shells and dried bones, and is an excellent mill and largely used. Will also grind corn.

Weight, without stand, 33 lbs.	\$ 6.00
Weight, with stand, 64 lbs.	10.00

THE "RED CHIEF" RAPID-GRINDING FEED AND GRIST MILL No. 10

Capacity, 2 to 4 bushels per hour.

Equipped with extra-hardened burrs. Burrs are self-sharpening; they cut, do not mash.

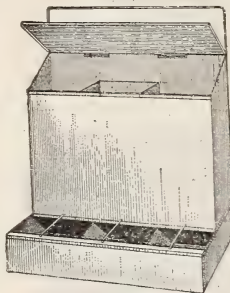
Grinds coffee, chicken feed and cracks peas, etc. Will make good corn meal and graham flour. Can be cleaned and adjusted in a moment's time without the use of a wrench. \$8.50.

NEW "RED CHIEF" No. 2 MILL

This Mill has feed gauge in the hopper, so that when grinding wheat, rice or other small grain the feed can be regulated for very fine grinding with this device. A child can turn the crank easily when grinding graham flour or table meal. Our new fine burrs in this mill. \$5.00.

PHILADELPHIA GAPE WORM EXTRACTOR

Postpaid, 35c Each

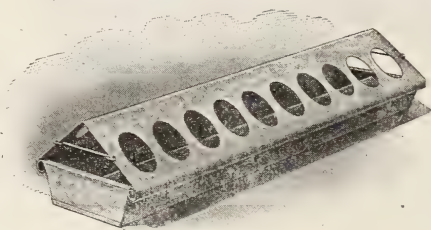
1-2-3 POULTRY FEEDER

For dry mash, scraps, shells, grit, charcoal or any poultry feed. When used for one kind of feed only, take out separator; for two kinds put separator in one end; when used for three kinds—say, scraps, shells and grit—put separator in middle, and you have three separate feeders.

1-2-3 Poultry Feeder,
\$1.25.

MODEL CAMEL-BACK CHICK FEED TROUGH

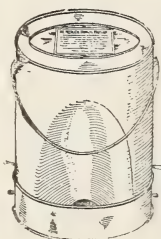
The Most Successful Chick Feeder



Prices:

10-in. size,
60c.

20-in. size,
85c.

THE PEERLESS DRINKING FOUNTAIN

is right. The water is always pure. It is protected from dirt and filth. Easy to clean and fill, and fowl cannot injure their combs when drinking. Simple in construction.

5-Qt. Peerless Fountains.....85c
Peerless Brooder Fountains.....40c

MODEL DRY MASH HOPPER

The Most Sanitary Anti-Clog Dry-Food Hopper Manufactured

PRICES:

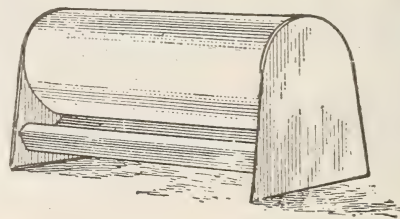
12 in. 12 qt.	\$1.50
18 in. 18 qt.	1.75
24 in. 24 qt.	2.00

PARCEL POST WEIGHT:

18 qt.	8 lbs.
12 qt.	6 lbs.
24 qt.	10 lbs.



Hopper Closed.

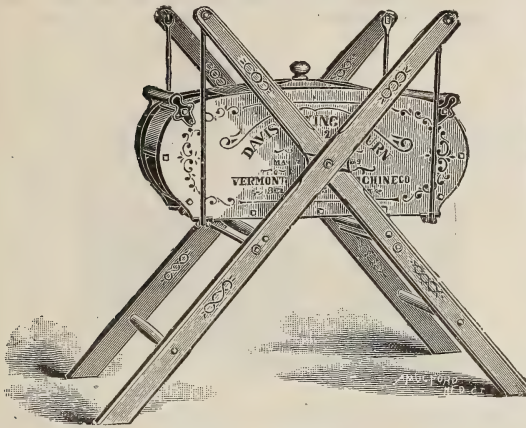


9-in. Hub
Chicken
Feeder,
40c.

10-in. Hub
Chicken
Feeder,
60c.

THE DAIRY

DAVIS SWING CHURN



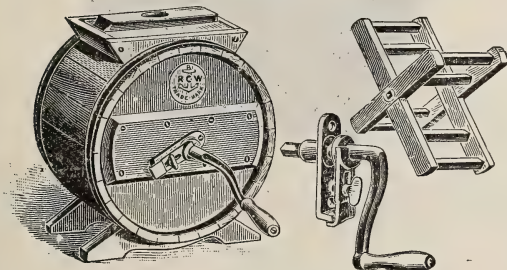
Easy to Keep Clean.

The round ends of the Churn cause the cream as it strikes against them to slide up and over, turning a complete somersault; consequently the cream is thoroughly agitated.

Each Churn has a glass indicator in the cover, thus enabling the operator to tell when the butter comes without raising the lid. The lid is ventilated and there is no slopping or dripping of cream. Easy to operate—in fact, any child can do it.

No.	Will Churn.	Capacity.	Price.
1	4 gallons or less	8 gallons.....	\$12.00
2	5 gallons or less	10 gallons.....	13.00
3	8 gallons or less	16 gallons.....	15.00
4	10 gallons or less	20 gallons.....	18.00
5	13 gallons or less	26 gallons.....	22.00

IMPROVED CEDAR CYLINDER CHURNS



Double Dasher—Thumb-Screw Lock.

We now use a double dasher, and the crank is locked to the churn with a clamp and thumb screw, which prevents leakage—lock cannot break. The top is large and dasher easily removed. The best Churn in use.

No. 1—3 gallons.	Price, each.....	\$4.00
No. 2—4 gallons.	Price, each.....	5.00
No. 3—7 gallons.	Price, each.....	5.50
No. 4—10 gallons.	Price, each.....	6.50

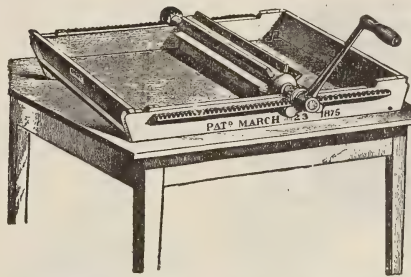
BLATCHFORD'S CALF MEAL

Perfect Milk Substitute.
Raise calves the Blatchford way—costs only one-fourth as much as raising them on whole milk.

25-lb. Bag.....	\$1.75
50-lb. Bag.....	3.50
100-lb. Bag.....	6.00



REID'S BUTTER WORKER



Consists of a tray and a roller with paddles, which is turned by a crank and traverses from end to end of tray. It acts on the butter on precisely the same principle as a ladle in

the hands of a person, but with perfect uniformity and without injuring the grain.

No.	Inside Measurement.	Cpty. Lbs.	Wgt. Lbs.	Retail Price.
1	23x36x2½ ins.	50	45	\$12.50
2	20x36x2½ ins.	30	29	10.00
3	17x27x2½ ins.	20	25	8.50
4	14x24x2½ ins.	10	20	7.50

DAZEY GLASS CHURN

—Nos.—			
10G	20G	30G	40G
—Pts.—			
3	5	7½	9

For those churning from one pint to one-half gallon, they undoubtedly are the most convenient and quickest churn made.

PRICES:

No. 10	\$1.25
No. 20	1.75
No. 30	2.25
No. 40	2.75

Made in Four Sizes

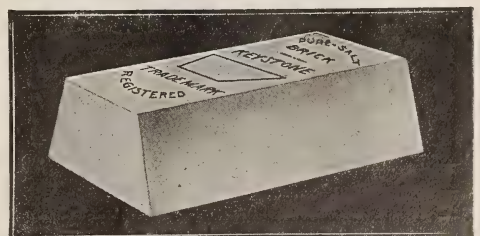


SHAW'S CALF WEANERS

The Shaw Calf Weaner is thoroughly practical. The action is entirely in the basket, it being hinged to the end of the nose piece. The basket is made of heavy galvanized wire, with extra bars running through, and can be adjusted to suit the calf's head.

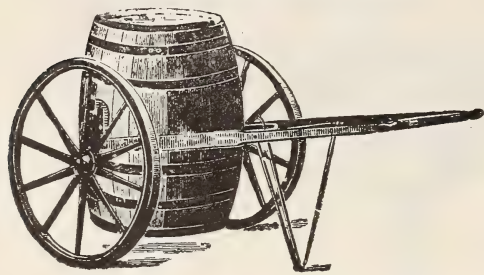
Prices: No. 1, 50c. No. 2, 75c. No. 3, \$1.25.

COMPRESSED PURE SALT BRICKS



20c each. Case, 1 dozen, \$2.00.

WATER TRUCK AND BARREL



	Price.
Plain Truck and Barrel, 1½-inch Tires.....	\$17.50
Truck alone, 1 pair Trunnions.....	12.00
Pair of Trunnions alone.....	.90
Extra 3-inch Tire.....	2.00

CYCLE BALL-BEARING STEEL-FRAME GRINDSTONE



Price, Complete, \$7.50

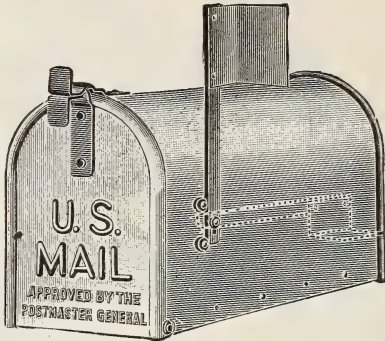
CRYSTAL METAL FARM BELLS



	Diam. of Bell.	Price.
No. 1—40 pounds.....	15 inches	\$4.00
No. 2—50 pounds.....	17 inches	5.00
No. 3—75 pounds.....	19 inches	7.50
No. 4—100 pounds.....	21 inches	10.00

RURAL MAIL BOX No. 1

Made to Conform With the Specifications of Post-Office Department Issued November 10, 1915



GENERAL DESCRIPTION.— Made of galvanized steel; body 22 gauge; door 20 gauge; finished in aluminum bronze; letters in door are heavily embossed, "U. S. Mail," "Approved by the Postmaster-General"; door is hinged at bottom, opens and closes with ease, can't blow open; door catch holds door TIGHT when closed; signal is easily operated, and has a large flag bent in middle to a right angle, which makes it visible from all directions. Price, \$1.50.

Each Box is equipped with a small coin holder.

IRON KETTLES



	Price.
No. 4—Capacity, 18½ gallons.....	\$7.00
No. 5—Capacity, 21½ gallons.....	7.50
No. 6—Capacity, 25½ gallons.....	8.00
No. 7—Capacity, 29½ gallons.....	8.50

CORN BASKETS



1-Bushel Bamboo Basket, Plain.....	\$1.40
1½-Bushel Bamboo Basket, Plain.....	1.75
2-Bushel Bamboo Basket, Plain.....	2.50
1-Bushel Bamboo Basket, Iron Strap.....	1.60
1½-Bushel Bamboo Basket, Iron Strap.....	2.25
2-Bushel Bamboo Basket, Iron Strap.....	2.50

GENUINE MALTA SHOVEL PLOWS**Single and Double Shovel**

Blade has two holes.

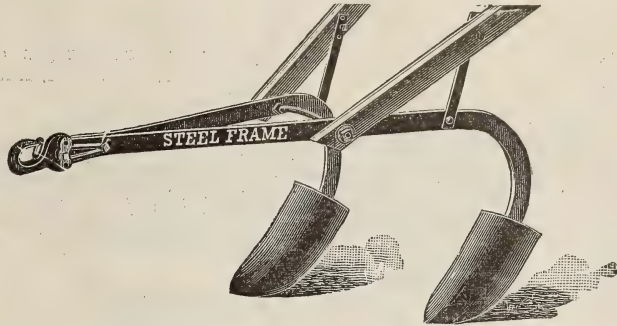
Clevis is adjustable.

Frame all steel.

The beams on this Plow are made of steel $1\frac{1}{2} \times 1\frac{3}{8}$ inches.

This gives the Plow a light draft, and the beams are stronger than those made of $1\frac{1}{2} \times \frac{3}{4}$ -inch iron.

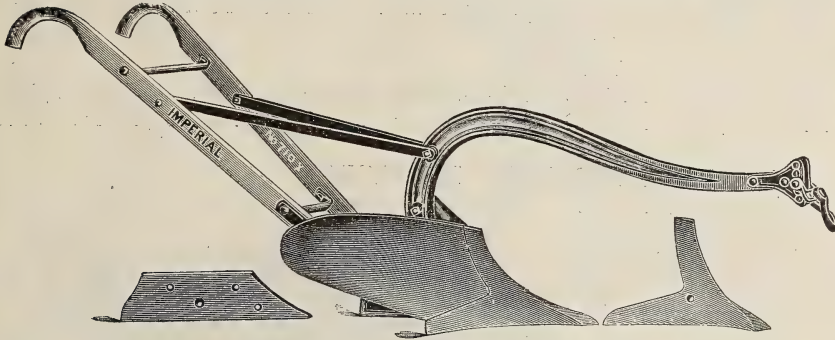
Size of shovel, 6x11x7-16 inches.

**PRICES:**

Double Shovels,
\$5.00.

Single Shovels,
\$4.50.

Triple Shovels,
\$6.00.

BUCHER & GIBBS "IMPERIAL" STEEL AND WOOD-BEAM PLOWS

Imperial Plows are made in all sizes, steel or chilled, from a small three-horse plow, either right or left-hand; wood pony to a large two or or steel beam, with or without wheel and jointer.

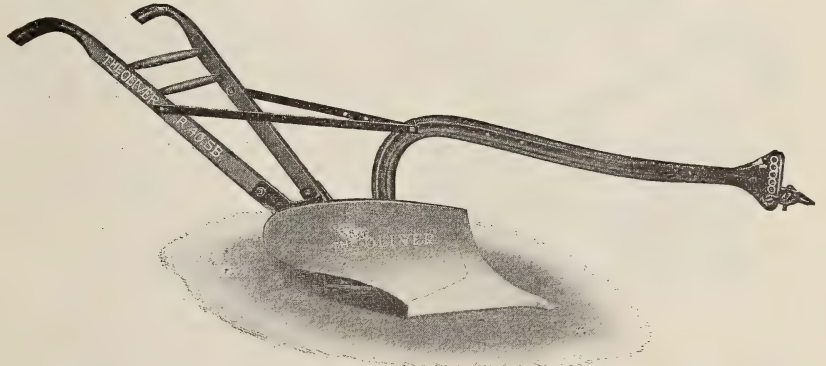
Imperial Hillside Plows, in Wood or Steel Beam, All Sizes

	Price.		Price.
No. 10 $\frac{1}{2}$ —Steel Beam.....	\$20.00	No. 612—X-Steel Beam.....	\$22.00
No. 12—Steel Beam.....	22.00	Wheels extra for all Plows.....	1.75
No. 710—X-Steel Beam.....	20.00	Jointers, complete	3.50

GENUINE OLIVER CHILLED PLOWS

Don't forget to look for the OLIVER Trade Mark on all OLIVER goods—none genuine without it.

In ordering Oliver Chilled Plows state whether Wood or Steel Beam and Right or Left Hand.



NOTE.—A Clevis Wrench and an extra Share are included in prices for Plows fitted with Cast Shares, but Wheels and Jointers are not.

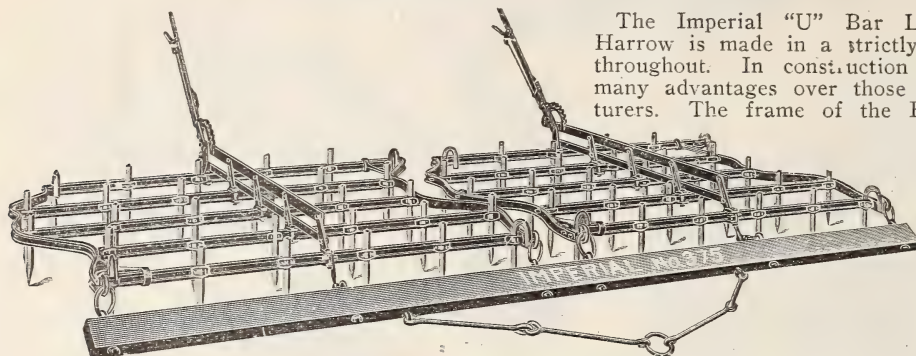
Steel Beam—Right and Left Hand

	Price.		Price.
No. 19	\$19.00	All Jointers	\$3.50 extra
No. 20	20.00	All Wheels	1.75 extra
No. 40	22.00		

GENUINE FARMER'S FRIEND PLOW

No. 5 Plow \$6.00 each

THE IMPERIAL "U" BAR LEVER HARROW



The Imperial "U" Bar Lever Spike-Tooth Harrow is made in a strictly first-class manner throughout. In construction this Harrow has many advantages over those of other manufacturers. The frame of the Harrow is channel steel, of good weight and strength. The "U" Bars pass through the main frame of the Harrow, and are held in position by a malleable clamp. The construction gives great strength to

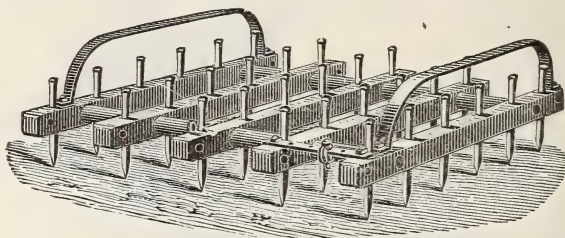
the Harrow and at the same time allows flexibility. Each section is fitted with four steel runners, one attached to each corner, for transportation. These runners, when the Harrow is at work, are on top of the frame and do not obstruct. By throwing the lever forward the runners are thrown down in a position which carries the entire Harrow off the ground.

No.	Price.	No.	Price.
370—1-section, 25 $\frac{5}{8}$ -inch teeth, 97 pounds.....	\$12.00	375—2-section, 60 $\frac{5}{8}$ -inch teeth, 215 pounds.....	\$24.00
371—2-section, 50 $\frac{5}{8}$ -inch teeth, 173 pounds.....	22.50	372—3-section, 75 $\frac{5}{8}$ -inch teeth, 290 pounds.....	30.00

BROWN GARDENERS' HARROW

Made in one section. Contains 30 and 24 teeth. It has no equal as a tool for market gardeners. Designed to be used for one horse, and is easily handled in small garden plots. The Harrow is strong and durable and is furnished with runners for transportation.

25-tooth Harrow, cuts 3 feet 8 inches wide.....	\$10.50
30-tooth Harrow, cuts 4 feet 6 inches wide.....	11.00
40-tooth Harrow, Double Hinge.....	17.00



"CUTAWAY" SINGLE-ACTION HARROW

Regular, With Tongue Truck



The mere fact that the CLARK "CUTAWAY" Single-Action Harrow has established satisfactory records is proof that it is made of high quality material and constructed along the most efficient lines. To obtain these results it is built up to a standard determined by actual field tests.

The illustration on this page is the CLARK "CUTAWAY" Single-Action Harrow equipped with tongue truck. Note that the head is built directly on top of the gangs and that the tongue, seat, braces and levers are attached to it, making the disks carry the entire weight of the machine. This construction gives such perfect balance that there is practically no weight on the horses' necks, making it optional whether a tongue truck is used or not. It also means penetration, as the weight of the driver and the machine is over the disks and is utilized in increasing the efficiency of the harrow. The gangs are controlled by two levers conveniently placed, which allow them to be worked together or independently. When used in half-lap these separate levers are an important feature. Single-action harrows, to render satisfactory service, really need to be reversible. The CLARK "CUTAWAY" Single-Action Harrow is reversible—that is, the gangs can be swung end for end, so that the soil may be thrown either out or in. To reverse it is only necessary to pull the cotter pins that hold the lever links, drop the links, swing the gangs around and reattach them.

The disks are made of a high-grade quality of cutlery steel and the edges are FORGED SHARP. The bearings are oil-soaked hardwood and are dust-proof.

This practical construction signifies light draft and efficiency, which are two of the outstanding features of CLARK "CUTAWAY" Implements.

A-4-8-16—Clark's Harrow, Single Disk (with Tongle), weight 255 pounds.....	\$46.15
X-4-8-18—Clark's Harrow, Single Disk (with Fore Truck), weight 295 pounds.....	58.35

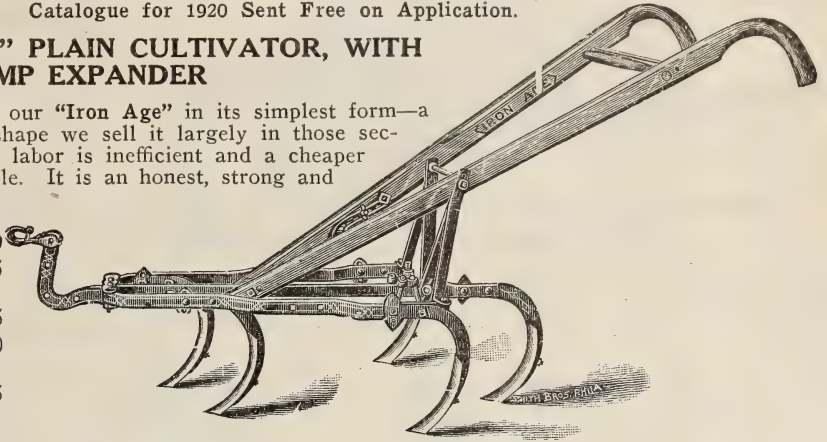
IRON AGE FARM AND GARDEN TOOLS

These Tools Are Well Known to Be Most Satisfactory and the Best. A Complete Descriptive "Iron Age" Catalogue for 1920 Sent Free on Application.

No. 37 "IRON AGE" PLAIN CULTIVATOR, WITH CLAMP EXPANDER

In this cut we represent our "Iron Age" in its simplest form—a plain cultivator. In this shape we sell it largely in those sections of the country where labor is inefficient and a cheaper and simpler tool is desirable. It is an honest, strong and faithful servant.

Price, as in cut.....\$6.00
 With Plain Wheel, add .75
 With Lever Expander, add .75
 With Lever Wheel, add 1.00
 With Horse Hoe and Sweep, add 2.25



DIXIE STEEL-FRAME CULTIVATOR

Price	\$5.00	Add for Lever Expander.....	\$.75
Add for Draft Rod.....	.25	Add for Wheel.....	1.00

THE No. 6 "IRON AGE" COMBINED DOUBLE AND SINGLE-WHEEL HOE HILL AND DRILL SEEDER

Packed, weight, 57 pounds. Price.....\$17.50

No. 306 — Combined Hill and Drill Seeder (side hoes and teeth only).

Price, \$16.50.

No. 306 — Hill and Drill Seeder only.

Price, \$14.00.



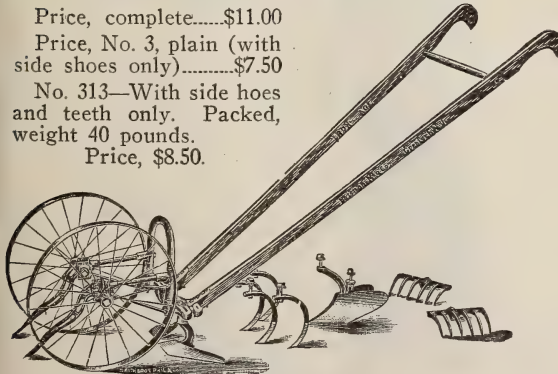
The No. 301-R "IRON AGE" DOUBLE AND SINGLE-WHEEL HOE

Price, complete.....\$11.00

Price, No. 3, plain (with side shoes only).....\$7.50

No. 313—With side hoes and teeth only. Packed, weight 40 pounds.

Price, \$8.50.



3016-E HARROW AND CULTIVATOR

A combination tool that is a quick seller because of its high frame, clean-cut construction and adaptation for many crops and two kinds of cultivation, as a harrow and as a cultivator.

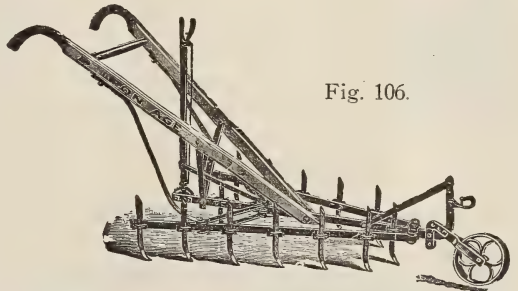


Fig. 106.

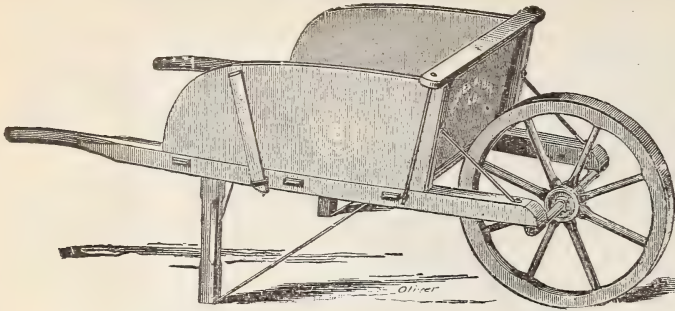
With Expander Lever and Plain Wheel.....	\$13.00
Without Lever and Wheel.....	11.00

No. 19-C "IRON AGE" WHEEL PLOW CULTIVATOR

Price, \$5.50.
 Packed, Weight, 22 lbs.



PRICES SUBJECT TO CHANGE WITHOUT NOTICE

BUCH'S GARDEN BARROWS

No. 1—Large Garden Barrow.....	\$7.50
No. 3—Medium Garden Barrow.....	6.00
No. 4—Boys' Garden Barrow.....	5.00

STEEL GARDEN RAKE

Cut From One Piece of Steel—

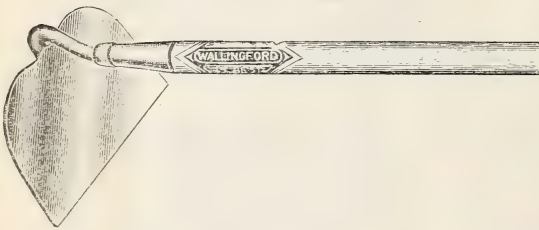
Strong and Durable



	Each.
10-tooth	\$0.60
12-tooth	.70
14-tooth	.90
16-tooth	1.25

GARDEN HOE

Sizes for Boys, Ladies and Men



6, 7 and 7½-inch.....	50c to \$1.00
8-inch Cotton Hoe	.90

POTATO DRAG or HOE

4-Tine Fork	\$1.00
5-Tine Fork	1.25
6-Tine Fork	1.50

**TWO-PRONG
ONION HOE**Price,
35c and 50c.Single-Prong
Onion HoePrice,
35c and 50c.**SCUFFLE HOES**

Price, \$1.00 each.

**SPADING FORK**Price,
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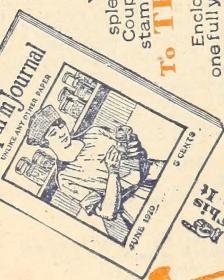
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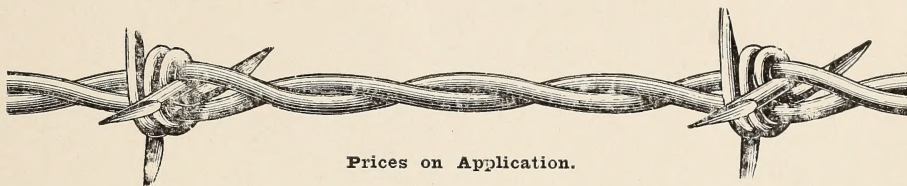
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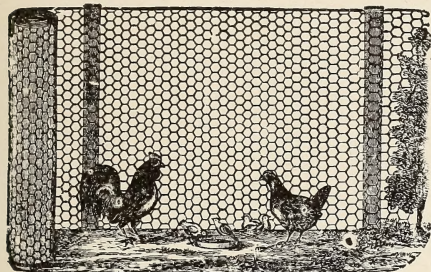
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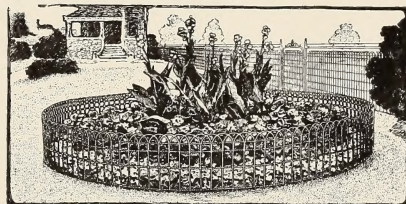
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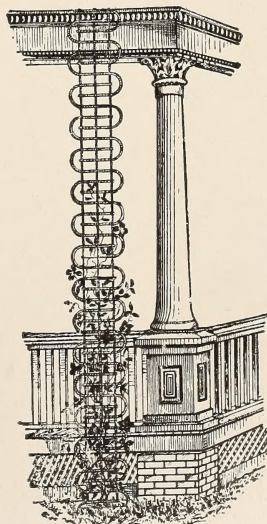
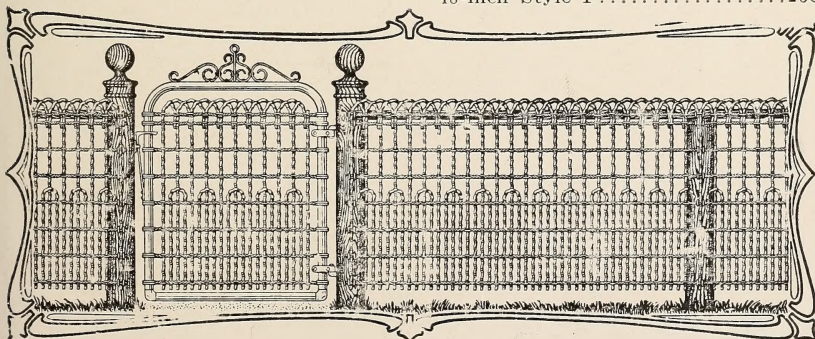
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